NOVEMBER 1972

Saturday Review

ONE DOLLAR

SCIENCE

Ubiquitous Telephones

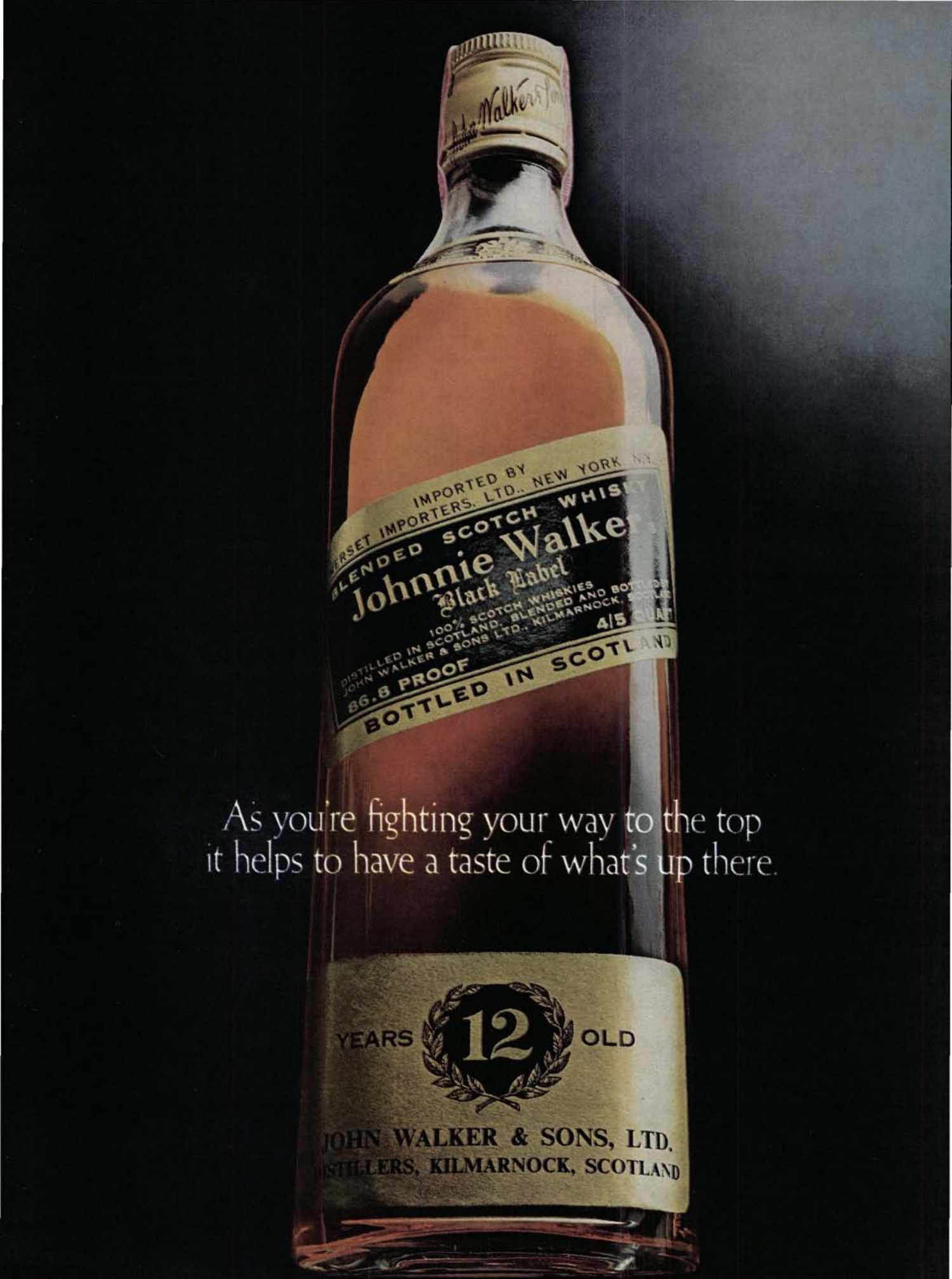
Louis Leakey, Archeologist

Hidden Fuse in SALT

The Unmentionable Disease

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

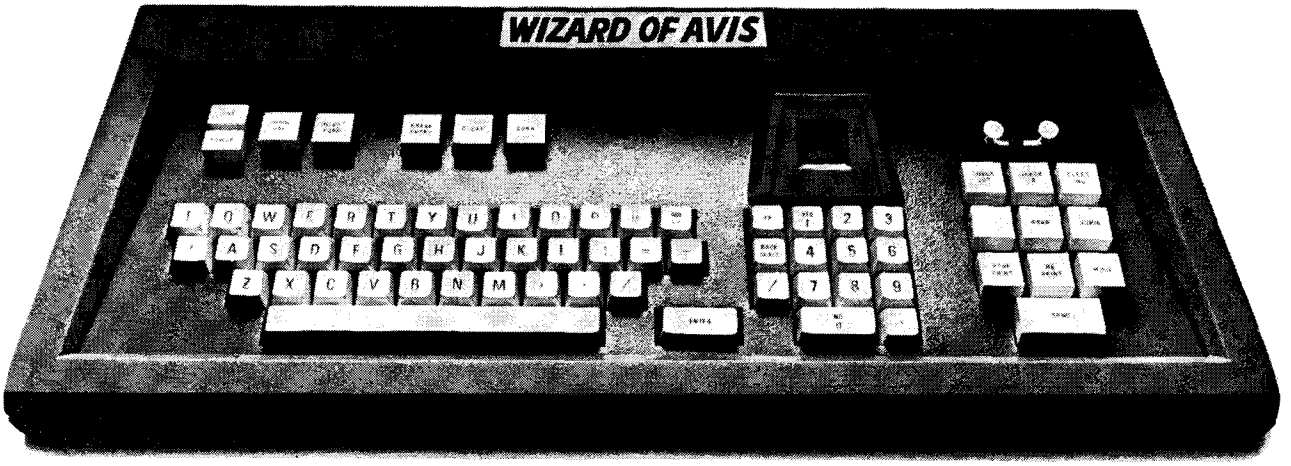
ON SALE WEEK ENDING OCTOBER 28, 1972



ABOUT $10 A FIFTH. PRICES MAY VARY ACCORDING TO STATE AND LOCAL TAXES. 12 YEAR OLD BLENDED SCOTCH WHISKY. 86 PROOF. BOTTLED IN SCOTLAND. IMPORTED BY SOMERSET IMPORTERS, LTD., N.Y., N.Y.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Have you seen the new Avis buttons?



This is one of the terminals of The Wizard® of Avis. The most sophisticated computer in the travel world. You'll find it at the Avis counter. For speed, accuracy, and reliability, nothing can beat it.

The Wizard of Avis. It makes Avis the most buttoned-up rent a car company in the world.

It confirms reservations instantly. You'll get the kind of car you want. Where you want it. When you want it.

If you're in The Wizard's Golden File℠—The Wizard's permanent file—when you reserve a car, your rental form can already be printed up and ready to sign when you reach the Avis counter.

What's more, when you turn in your car, The Wizard computes your bill automatically and may find you qualify for a lower rate.

Just as important as what The Wizard can do is what it can't do.

It can't forget a reservation. Or lose one.

It can't make a mistake in spelling. Or arithmetic. Your bills are letter-perfect. And number-perfect.

It can't rent you a car that's been set aside for servicing or repairs. That's comforting.

It can't honor stolen credit cards. That's comforting, too. Unless you're trying to use one.

The Wizard of Avis. Now at many Avis counters. Soon almost everywhere.

Our old buttons are all a lot of fun.

Our new ones are all business.

Avis

We try harder.

® ℠ WIZARD IS A REGISTERED TRADEMARK AND GOLDEN FILE IS A SERVICE MARK OF AVIS RENT A CAR SYSTEM, INC

Avis rents the dependable Dodge and other fine cars.

©AVIS RENT A CAR SYSTEM, INC.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Saturday Review of Science

INDEX

NOVEMBER 1972 VOLUME LV, NUMBER 44

SR UP FRONT

7
Peter Bridge Goes to Jail
By Robert S. Gallagher
An investigative reporter in New Jersey was recently locked up. His crime? Refusing to disclose confidential sources to a grand jury. Though the implications of his case are frightening, nobody started to protest until it was too late.

12
Keep On Truckin' With Nixon
By Steven V. Roberts
At the beginning of the campaign the Democrats thought the youth vote was theirs and that it would win them the election. Why, then, are many young people working for the reelection of the President—and who are they?

14
Voyage to a Dead Sea
By Mike Jahn
Our reporter sails with the men who check on the pollution in New York Harbor.

19
Red Star Over San Francisco
By Min S. Yee
October 1 was not just another early autumn Sunday in the largest Chinese community outside Asia. For the first time in this country a large group openly celebrated China's "liberation."

22
Blind Dinner
By Jack Star
For twenty agonizing minutes the writer learned what it is like to be sightless.

24
TRAVEL: A Garlicky Guide to Good Eating
By Rene Lecler
How to read a Mediterranean menu.

30
LETTERS

32
EDITORIAL:
The Virtues of the Filibuster
By Sen. Alan Cranston
The senior senator from California discusses how the filibuster, once anathema to liberals, has become a perfectly respectable tool.

SATURDAY REVIEW is published weekly at $24 per year by SR, Inc., 380 Madison Avenue, New York, N.Y. 10017. This is the combined price if the family of the four *Saturday Review* monthly magazines is bought in combination—*Saturday Review The Arts, Saturday Review The Society, Saturday Review Education, Saturday Review Science.* Each of these special-interest magazines is available separately at $12 for one year. Second-class postage paid at New York, N.Y., and at additional mailing offices. Volume LV, Number 44. © 1972 Saturday Review Inc. All rights reserved. Send all correspondence about subscriptions and remittances to Subscription Department, SATURDAY REVIEW, Box 2043, Rock Island, Ill. 61207.

SCIENCE

33
The Global Telephone Network
By Brenda Maddox
Strap on your Dick Tracy wrist-watch picture telephone, whirl a few dials, and chat with your friendly computer.

42
The Carville Hansenarium
By Alex Shoumatoff
With a new name and effective treatment on a converted plantation, leprosy is losing its opprobrious image.

54
The Hidden Fuse in SALT
By Bernard T. Feld
On the surface the SALT agreements sound promising. But so did a lot of previous treaties. Wherein lies the rub?

58
Neurosis in Dogs
By Michael Fox
Dragging our dogs along by their leashes, we impose emotional and genetic stresses unknown to their wild forebears.

64
A Diet Guide for Chronic Energy Consumers
By Eric Hirst and Robert Herendeen
Corpulent energy bills, fuel shortages, and electric power brownouts are the by-products of energy obesity.

67
Science Issues in the Election
By Daniel S. Greenberg
You pays your money and you takes your choice.

70
Louis S. B. Leakey, 1903–1972
By Harry L. Shapiro
Through his lifelong probings of Olduvai Gorge in Tanzania, Louis Leakey greatly expanded our knowledge of early man.

76
Will the Future Be Shaped by Rational Policies?
By Kenneth E. F. Watt
Or are we fated to blunder through?

SR REVIEWS

77
BOOKS

77
The Doomsday Syndrome
By John Maddox
Reviewed by Benjamin DeMott

78
The Tree Where Man Was Born/
The African Experience
By Peter Matthiessen/Eliot Porter
The Serengeti Lion
By George B. Schaller

80
A History of Zionism
By Walter Laqueur
Reviewed by Herbert Gold

82
Shorter Reviews
Albert Einstein: Creator and Rebel
By Banesh Hoffmann with Helen Dukas
Will California Fall Into the Sea?
By Peter Briggs
Winter Trees
By Sylvia Plath
The Social Animal
By Elliot Aronson
Ella Price's Journal
By Dorothy Bryant
Glass People
By Gail Godwin
Reviewed by Genevieve Stuttaford

84
On the Docket
By O. L. Bailey

90
DANCE: Marathon
By Walter Terry

94
FILMS: Two Assassinations
By Arthur Knight

95
MUSIC: New Organ, Capital Music in D.C.
By Irving Kolodin

GAMES

80
Wit Twister
Literary Crypt

100
Kingsley Double-Crostic No. 2012

PHOTOGRAPHIC AND ART CREDITS:
Cover Alpha Photographers Association; pp. 7, 14, 19 illustrations by Sandra Forrest; pp. 34-35 Bell Telephone Laboratories; pp. 36-37 illustrations by Fumio Kobayashi; p. 37 bottom, Bell Telephone Laboratories; p. 39 illustrations by Sandra Forrest; p. 40 illustration by Fumio Kobayashi; pp. 41-48, 53 John Messina; pp. 55-56 Charles Mendez; pp. 58-62 John Dawson; pp. 67, 69 Jerry McDonald; pp. 70-72 National Geographic Society; p. 76 illustration by Masami Daijogo; p. 77 illustration by Sandra Forrest; p. 90 Doug Bernstein

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

IN ORDER TO TALK ABOUT WINE, YOU HAVE TO LEARN THE LANGUAGE.

Wine has its own language, not in order to be uppity or anything like that.

Rather, wine words are used in an effort to describe taste sensations—an impossible task from the start since taste can't really be put into words, and everyone has a different sense of it.

Be that as it may, here is a glossary of wine terms brought to you by Inglenook, the most expensive wine made in America.

We've divided our vocabulary into two sections in order to cover those words which describe taste sensations observed in the mouth and those observed in the nose.

WORDS OF MOUTH.

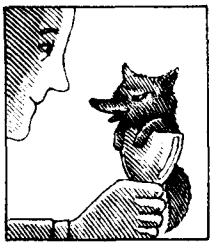
ACIDITY: The essential natural sourness which gives bite on the tongue. It is an important keeping quality and contributes to bouquet.

BALANCED: The best combination of physical components—fruit, alcohol, tannin, acid, and the less tangible grace elements of "breed," "character," and "finesse."

BIG: A wine strong of flavor and high in alcohol and acidity.

BODY: The feeling of weight in the mouth, a tactile sense of substance that depends on the solids in solution and which distinguishes heavy from light wines.

CHARACTER: Complexity in a wine that shows unmistakable and distinctive features, possibly defying precise description.



Foxy wine.

DELICATE: A light and agreeable balance of flavor and quality.

DEPTH: Subtle richness giving a feeling of many flavor-layers.

DRY: Complete absence of sweetness.

EARTHY: A mineral or organic taste of the soil or terrain.

FINE: Superior overall quality and complexity.

FINISH: The "aftertaste," or the firm and distinctive flavor remaining after swallowing a well-balanced wine.

FOXY: Describing the distinctive spicy tang of native American grapes.

FULL-BODIED: Thick in the tactile sense.

LIGHT: Slender of body.

LUSCIOUS: All the balance qualities of softness, sweetness, fruitiness and ripeness.

MELLOW: Soft, ripe and well-matured.

NOBLE: Wine of consistent and continuing great quality and elegance.

NUTTY: A crisp, almost salty taste used to describe some heavy, dry white wines and Sherry.

RICH: A full, but not necessarily sweet, combination of fruit, flavor and body.

RIPE: Wine in its full bloom of maturity and mellowness.

ROBUST: Tough, full-bodied wine with much tannin that makes it appear immature, though it may develop in time.

VELVETY: An expression of soft, silky smoothness, implying complexity and quality.

VIGOROUS: A lively, healthy, winey sense of taste descriptive of developing young wines.

WORDS OF NOSE.

ACIDITY: Present and natural in all grapes and wines. Proper acidity in a young wine gives it liveliness and a pleasant mouthwatering quality.

AROMA: The perfume of the grape, in contrast to "bouquet" which is the smell of the wine itself.

BOUQUET: The smell of wine, being characteristic odors developed by oxidation of fruit acids and alcohol.

Bouquet.

CLEAN: The absence of foreign or unpleasant smells.

DEEP: A bouquet of full, rich and lasting quality.

FLINTY: The smell of struck flint, typical of certain austere dry wines from high mineral soil.

FRAGRANT: Attractively and naturally scented.

FRUITY: A pleasantly ripe but not necessarily grapy smell.

GRAPY: A rich, sweet aroma produced by certain grape varieties.

NOSE: The combined bouquet and aroma of a wine.

PERFUME: A quality of bouquet developed in the maturing process, as opposed to aroma.

SPICY: Rich and herb-like.

STALKY: A descriptive smell of damp twigs.

WOODY: A particular smell derived from aging in oak casks.

The nose of wine.

WINE LANGUAGE, SELF TAUGHT.

Of course, the best way to learn the language of wine is not from a book or a list of words like this, but rather from the wine you drink.

And if you buy the best wine you can afford, expressions like "such body," "such balance," and "such bouquet" will spring to mind.

Such is the case with Inglenook.

When tasted against the finest French wines at the National Auction of Rare European and American wines, Inglenook Estate Bottled wine evoked an outpouring of superlatives which included most of the above and some no one had ever heard of.

Try Inglenook yourself.

It's guaranteed to improve your vocabulary with only one glass.

ESTATE BOTTLED

Inglenook

NAPA VALLEY
WHITE PINOT

Deliciously fine wine, with taste to come with the outstanding taste and harmony of 1969 the White Pinot grape, made from grapes grown in the Inglenook Napa Valley vineyards. Produced and Bottled by Inglenook Vineyards, Rutherford, California. Alcohol 12.5% by Volume

INGLENOOK

We make the most expensive wine in America.

This ad is one of a series. If you'd like copies of the other ads, send your name and address to The Cellarmaster, Box I, Inglenook Vineyards, Rutherford, CA 94573.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

CORMORANT FISHING, CROCODILE FARMS, MOUTH-WATERING BABI GOLING, AND 999 OTHER EXPERIENCES YOU COULD MISS IN THE ORIENT

(WITHOUT THIS FREE BOOK).

The Orient is only inscrutable until you get this big book of vacation ideas. It contains 64 tours and de-tours—some big, some little, some plain, some fancy.

It's just the sort of book you'd expect from the airline of the Orient for 27 years. And it's yours for the asking. Send the coupon and see what you could be missing.

I don't want to miss a thing.
Please send your free brochure.

Name_____

Address_____

City_____ State_____ Zip_____

My travel agent is:_____

Cathay Pacific Airways—Dept. SR-C-10/28
291 Geary St., San Francisco, CA 94102

CATHAY PACIFIC AIRWAYS

The airline to fly in the Orient after you fly to the Orient.

John J. Veronis
President
Editor-in-Chief

Nicolas H. Charney
Chairman
Editor-in-Chief

SaturdayReview

Editor
Nicolas H. Charney

Executive Editor
Ronald P. Kriss

Design Director
Donald K. Wright

SCIENCE

Managing Editor
Alfred Meyer

Senior Editors
Alan Anderson, Jr.,
Douglas B. Gasner, Frank Kendig

Art Director
John Isely

Assistant Editor
Ellen Weber

Associate Editor
Sally Bates

Contributing Editor
Barbara Ford

Staff
Gail Butterfield

Washington Editor
Daniel S. Greenberg

General Managing Editor
Robert Cowley

Music Editor
Irving Kolodin

Assistant Editors
Anne Horn, Barbara King

Copy Editor
Caroline Stevens

Art Production Manager
Don Letta

Book Review Editor
Eliot Fremont-Smith

Associate Book Review Editors
Philip B. Flamm, Joseph A. Kanon,
Genevieve Stuttaford

Letters Editor
Ava Swartz

Editorial Production Director
Stanley Redfern

Senior Editors
Leonidas Contos,
Charles E. McLaughlin,
Jon Swan

Contributing Editors
O. L. Bailey, Benjamin DeMott,
Alan Green, Henry Hewes,
Arthur Knight, Karla Kuskin,
Sally Lindsay, Richard Poirier,
Peter Schrag, Walter Terry,
Brian Vachon

PRODUCTION STAFF Robert Boylan, *Copy Editor*; Joel Homer, Michael Schrader, *Copyreaders*; Harrie George, *Photo Research*; Sandra Forrest, *Design Assistant*; Fumio Kobayashi, *Production Artist*; Tierney Picardal, William Rose, *Production Associates*

ADMINISTRATIVE ASSISTANT Gail Barnet

GENERAL STAFF Marilyn Kelso, JoAnne White

STAFF SERVICES Irving Armstrong, Mary Hanson, Vincent Hollins, Humberto Ramirez

THE ARTS John Poppy, *Managing Editor*; Neil Shakery, *Art Director*; Phyllis Seidel, Edmund White, *Senior Editors*; Jim Gaines, *Associate Editor*; Marilyn Bethany, Patrick Merla, Ronald Najman, *Assistant Editors*; Dale Harris, *Contributing Editor*; Hildegard Kron, *Administrative Assistant*

EDUCATION David W. Cudhea, *Managing Editor*; Catherine Flanders, *Art Director*; James Cass, *Consulting Editor*; Peter A. Janssen, Henry S. Resnik, *Senior Editors*; Sheila Canning, K. C. Cole, *Assistant Editors*; Dale Harris, *Contributing Editor*; Hildegard Kron, *Administrative Assistant*

THE SOCIETY William H. Honan, *Managing Editor*; Wade Greene, Richard M. Levine, Lynne Williams, *Senior Editors*; Russell Schoch, Jr., *Associate Editor*; Peter Hauck, Edith Lorillard, *Assistant Editors*

Publisher
Robert J. Moore

General Business Manager
Nicholas Listorti

Production Director
John Ahrens

Treasurer
Nathan Cohn

Philip Broselofsky, *Controller*; Allen Roberts, *Personnel Director*; Bob Harrington, Joe Sullivan, Gary DeJong, *General Business Staff*; Diane Fagon, *Personnel Administrator*; Carolyn Nadler, *Personnel Assistant*; Sandy Bernstein, *Assistant to the Treasurer*; Carol Aiello, Rodolfo Alandy, Theresa Contrada, Carol Deer, Susan Thompson, Nancy Gruber, Barbara Levasseur, *Staff*

Circulation
Mark Edmiston, *Director*

John Klingle, John Ladd, *Managers*; Penny Ertelt, Carla Graubard, Gregory Cascante, Harry Sears, *Staff*

Advertising Director
Peter Veronis

Raymond Winship, *Promotion Director*; David Larkin, *Research Director*; William Lieberman, *Associate Manager*; Roberta Adams, Bernard Ganis, Charles Harris, Walter Koontz, William Pearson, William Rosen, Richard Setti, Duane Spong, *Category Managers*; Virginia Medina, *Advertising Services*; Marilyn Hiris, *Advertising Production Coordinator*; Eleanor McAvoy, *Classified Advertising Manager*

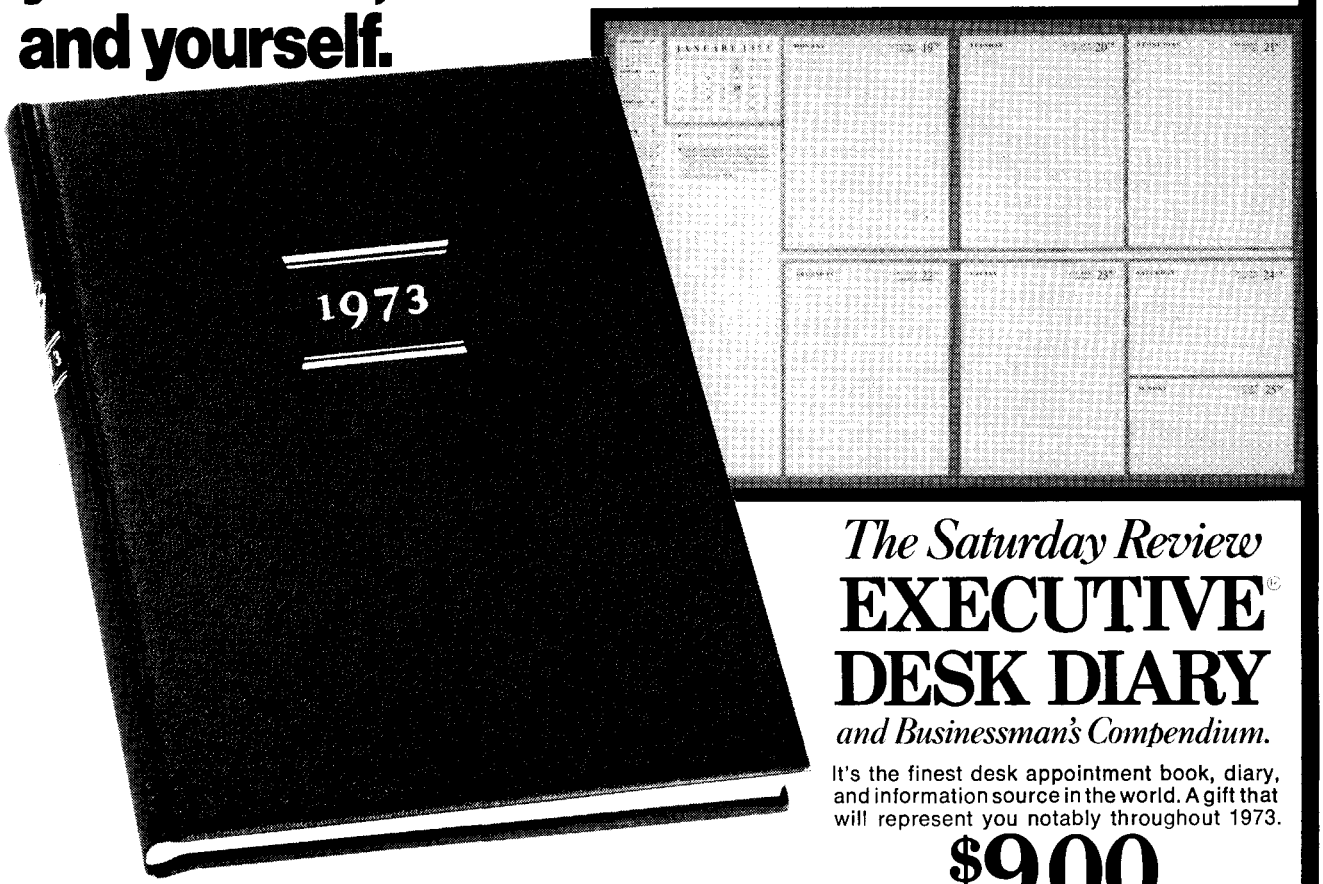
New York Sales Staff Roberta Adams, Bernard Ganis, Charles Harris, William Pearson

National Sales Staff Richard Sullivan, *Chicago Manager*; Littrell Clark, *Chicago Assoc. Manager*; Granville Swope, *Los Angeles Manager*; Sanford Heckinger, *San Francisco Manager*; Carol Andrie, Helen Andreadakis, Susan Caravello, Lenore Friedman, Barbara Levitt, Mary McGinn, Mary O'Shea, Frederica Plotkin, Carol Smith, Mary Thielo, Shirley Watler, *Staff*

Publishing Director
William D. Patterson

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Here's the perfect Christmas gift to give your friends, relatives, business associates and yourself.



The Saturday Review
EXECUTIVE® DESK DIARY
and Businessman's Compendium.

It's the finest desk appointment book, diary, and information source in the world. A gift that will represent you notably throughout 1973.

$9.00

With library-bound padded covers, exclusive Week-in-View® page format and weekly expense summary, the SR Executive Desk Diary features...

- 14 MONTH APPOINTMENT SECTION
- TELEPHONE/ADDRESS SECTION
- PRIVACY BOOK MARK
- SPECIALLY MILLED PAPER
- 192 PAGES, 7⅝" x 10"
- WORLD AND U.S. MAPS IN FULL COLOR, CREATED ESPECIALLY BY HAMMOND INC.
- 2 COLOR PRINTING THROUGHOUT

The 64 page Businessman's Compendium of information which prefaces The Saturday Review Executive Desk Diary contains:

CITIES OF THE UNITED STATES
Guide to New York
Guide to Washington
Selected Cities of the United States
Fifty Largest Metropolitan Areas

UNITED STATES GOVERNMENT
United States Government Agencies
Major Congressional Committees

TAXES AND SOCIAL SECURITY
United States Income Tax Tables
Income Tax Rates of Individual States
Social Security Information

NATIONAL DATA
Vital Statistics of the United States
Holidays in the United States
The Fifty States
Liquor Laws in the United States
Areas of United States Control

COMMUNICATIONS
Forms of Address in Letters and Speech
Protocol at Formal Receptions, etc.
Postage Rates
Telegraph and Cable Rates
Long Distance Telephone Rates
Selected National Magazines
National Associations of Businessmen

INTERNATIONAL DATA
United Nations and Other Agencies
Selected Cities of the World
Major Countries of the World

Order Today

INTERNATIONAL TRAVEL INFORMATION
Steamship Offices in New York
Foreign Travel Offices in New York
International Travel Regulations
Currency Conversion Table
Suggested Tipping Abroad
Weights and Measures
International Road Signs in Europe

INFORMATION FOR DAILY LIVING
Clothing Conversion Tables
Imported Vintage Wine Chart
Calorie Chart
World Population by Countries
Investment Information
Standard Reference Works
The Scoring of Common Card Games
First Aid

TO: SATURDAY REVIEW DIARY Dept. 142
380 Madison Avenue, New York, N.Y. 10017

Please send me____copies of the Saturday Review Executive Desk Diary & Businessman's Compendium at $9.00 each plus postage & handling.

☐ **Special gift imprinting available. Gold stamping of individual name or initials at 50¢ per line.**

Indicate initials or name(s) to be imprinted: _____

My check or money order is enclosed:

____Diaries at $9.00 each ..... $____

____Lines of imprinting at .50 per line ..... ____

Sales tax (N.Y. & Calif. residents only) ..... ____

____Postage and handling @ $1.00 each ..... ____

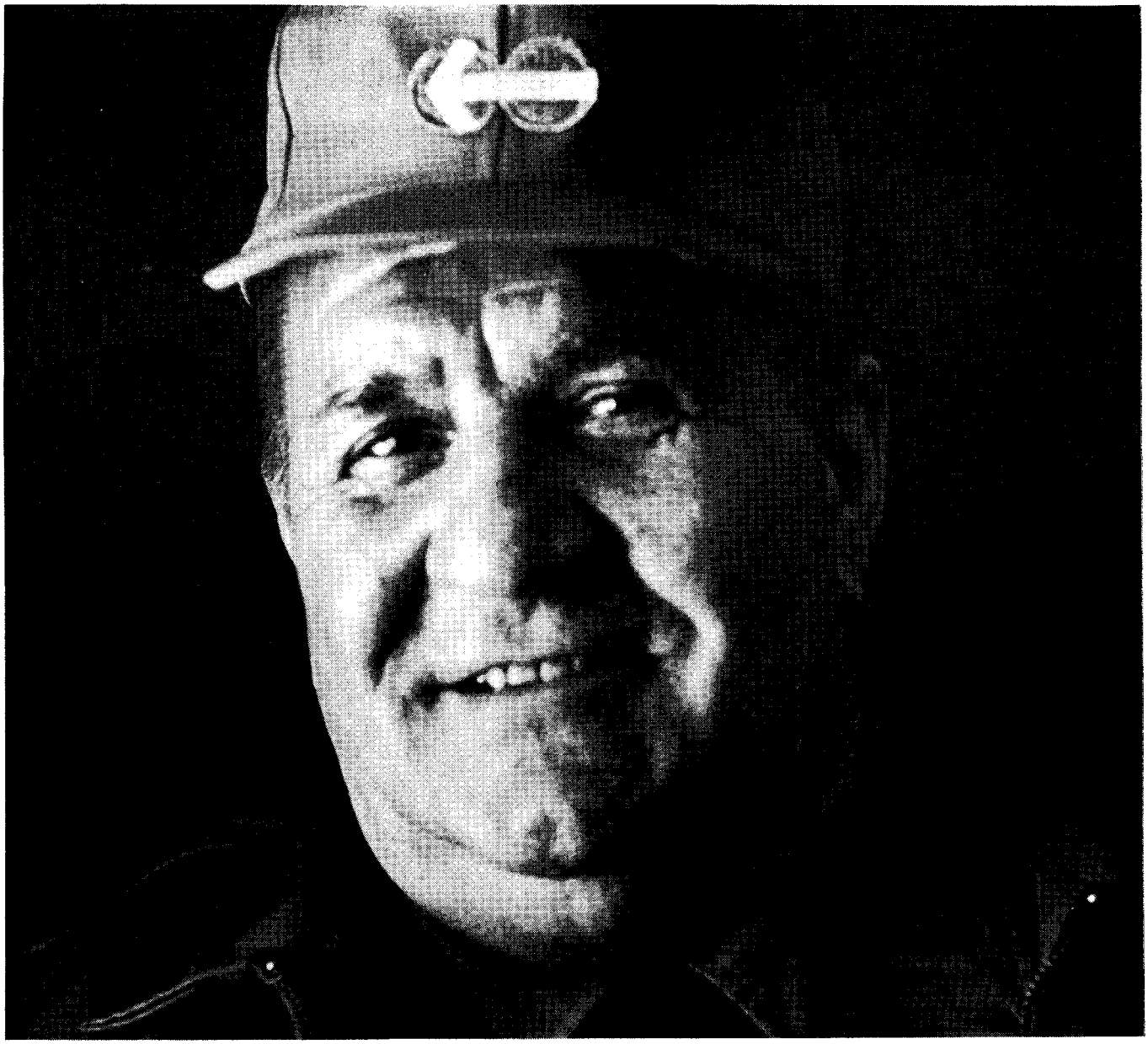
Total enclosed ..... $____

Name _____
(please print)

Address _____

City _____ State _____ Zip _____

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Confidence man

He's your northAmerican Van Lines driver. After he's completed the series of exhaustive training sessions we put him through, he's ready to earn your confidence.

He's taught to be an outstanding driver. That involves more than snaking a huge, loaded van through a tough obstacle course.

He learns to pace himself through all kinds of road and weather conditions. He learns not to drive when he's tired, sleepy, or when conditions won't permit safe driving.

He learns to load a van properly, so household goods won't shift or rattle around during shipment.

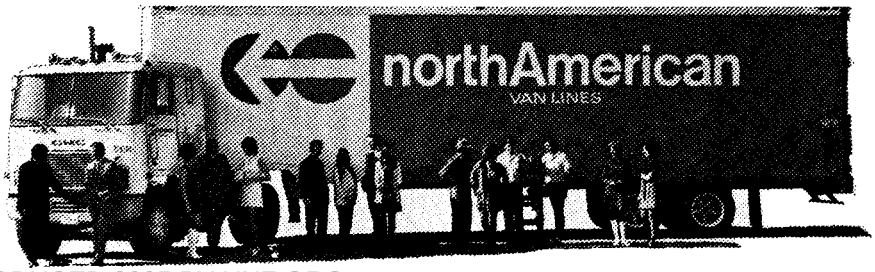
He learns to handle complex paperwork to keep things straight between you, him, and government agencies.

And he learns that moving your possessions is only part of his responsibility . . . that his understanding and consideration can make the difference between a happy move and a stressful situation.

By the time he's through, he's ready to justify the confidence you place in him.

He's earned it.

If you're moving, write for your free "How to Buy a Move" booklet:
northAmerican Van Lines
P.O. Box 988
Fort Wayne, Indiana 46801



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SR UP FRONT

OCTOBER 28, 1972

Peter Bridge Goes to Jail

BY ROBERT S. GALLAGHER

NEWARK, N. J.—Peter J. Bridge is a thirty-six-year-old investigative reporter. He is unemployed, in debt, and the father of two. He is also in jail and is determined to remain there until he convinces the Essex County prosecutor, Joseph P. Lordi, that he will not reveal any confidential sources to a grand jury, or until Lordi has the grand jury dismissed. The conviction of Bridge—for contempt—and his incarceration have become part of our historic debate over what, in law and in practice, constitutes freedom of the press in this nation.

Last May 2 the Newark *Evening News* published on its first page an exclusive article, signed by Bridge, about corruption in the Newark Housing Authority. The article began: "Mrs. Pearl Beatty, a commissioner of the Newark Housing Authority, said yesterday an unknown man offered to pay her $10,000 to influence her vote for the appointment of an executive director of the authority."

Mrs. Beatty is a political intimate of the mayor of Newark, Kenneth Gibson, who is the first black to hold the office and who has been unable in two years in office to gain effective control of the city's semiautonomous housing agency. Mayor Gibson is also involved in an intense struggle for political power with Assemblyman Anthony Imperiale, who this month announced his mayoral candidacy for the May 1974 election. In context Mrs. Beatty's tale of the bribery attempt was only one of a number of sensational charges exchanged by the opposing factions that finally forced the prosecutor to place the matter before the grand jury on May 19.

Robert S. Gallagher is a freelance writer who grew up, and still lives, in New Jersey.

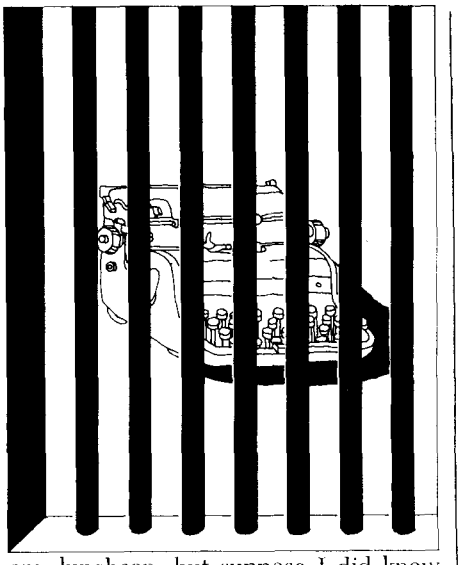
On June 6, after lengthy discussions with his staff, Lordi officially summoned Bridge to appear before the grand jury. The reporter says that the subpoena was unexpected. "I'm one of the guys who put many of the nails in [former Newark Mayor Hugh] Addonizio's coffin," Bridge told me, referring to Addonizio's conviction two years ago for extortion. "I've written far heavier stories than the Beatty piece and never been called before a grand jury."

Bridge is angry that Lordi made no attempt to confer with him before he issued the subpoena, a procedure that is *de rigueur* in most states and standard operating policy at the federal level. "He just dropped a subpoena on me," Bridge said, "and called me before the jury to answer a list of eighty-eight questions he had drawn up.

"At first I was determined not to go before the jury at all, just as [the *New York Times*'s Earl] Caldwell had refused to do," Bridge went on. "But my attorney and I decided that, if I went and limited my testimony to the content of the published story, we would be in a stronger position to test the legal protection of the state's shield law, as well as the First Amendment implications." New Jersey's so-called shield law, which is a part of the state's judicial rules of evidence, grants a newsman immunity from disclosing unnamed sources. Passed ten years ago, this law has never been tested in court.

Lordi maintained—and his position has since been upheld in a series of appeals that have reached as high as the state supreme court—that Bridge lost his immunity because he had named Mrs. Beatty as his source in the news story. Bridge argued that he regained his legal immunity the minute the prosecutor's questions went beyond "the four corners" of his article.

"For instance," Bridge explained later, "suppose I was asked whether Mrs. Beatty had told me about a lunch she had had with two other people. There was nothing in my article about



any luncheon, but suppose I did know about such a meeting. The normal thing for a reporter to have done would have been to call the other two people to verify what had been said at that restaurant. But as soon as I start answering qestions like that before a grand jury, I have to start revealing the other sources. If you answer one question, you have to answer them all."

In a flurry of skirmishes before a county court judge, Bridge and his attorney, Edward J. Gilhooly, contested the prosecutor's right to ask questions beyond the scope of the article. The judge upheld Lordi, and Bridge's subsequent refusal to answer the questions before the grand jury resulted in his contempt conviction on July 6 by Superior Court Judge H. Curtis Meanor.

Bridge's conviction came a week after the U.S. Supreme Court had upheld the contempt citations of Earl Caldwell [*SR*, Aug. 5] and two other reporters. When I asked Gilhooly whether he thought the prosecutor's action had been influenced by the Supreme Court's decision, he said, "Let me put it this way. Lordi wouldn't have moved against Bridge if the Caldwell decision had gone the other way. But to be honest with you, I don't understand

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

why the prosecutor is pressing this thing. We have it on good authority that the grand jury has already drawn up a presentment that merely criticizes the public officials involved for talking to the press. To keep this recessed jury in technical session just to punish Bridge is, in my opinion, an abuse of the prosecutor's authority."

The grand jury has not sat since June. Its term was extended at Lordi's request, first to September 15, then to October 30. I asked the prosecutor why he had done this. "It was extended," Lordi said, "because its probe into the Housing Authority has not been completed yet."

I then raised the question whether the grand jury had in fact drawn its presentment. "Well," the prosecutor said, "that may or may not be. I'm certainly not discussing any possible presentiment. But, assuming for the sake of argument that that were so, until such time as it [the presentment] were made public, the grand jury cannot be discharged."

The unfinished probe of the jury, it seems clear, consists of Bridge. The jury cannot be discharged until it makes its presentment; a presentment cannot be made by a jury in recess; and Bridge cannot be released from jail until the jury is discharged.

Edward Gilhooly is convinced that a fundamental issue of the Bridge case is whether public officials, through the direct threat of exposure before grand juries, can be stymied by other government officials, in this instance a county prosecutor, from speaking off the record to the press.

Bridge was more emphatic. "The judge keeps talking about *my* First Amendment rights. I don't see it that way. What's involved here are *your* rights and everybody else's," he told me after the state appellate division upheld his conviction on September 12. "If the courts are going to allow reporters to be intimidated by grand juries, then the free flow of information, particularly from public officials, is going to be seriously restricted. My conviction will be an open license to prosecutors to enlist reporters as their aides, and the press is either going to have to submit to this or else stop investigating."

Two weeks before the appellate court decision the *Evening News*, Bridge's employer for most of his thirteen-year career in journalism, abruptly ceased publication. The folding of this once-prestigious daily cost Bridge much more than the loss of his salary.

At the beginning his publisher had vowed publicly to support Bridge's defense all the way to the U. S. Supreme Court. After the closing, however, an official of Media General, Inc., of Richmond, Virginia, an organization that owned the *Evening News* and that is neither out of business nor insolvent, quietly informed Bridge that the defunct newspaper no longer had a legal obligation to pay for his court appeals. (The costs were quickly assumed by the American Society of Newspaper Editors, Sigma Delta Chi, and the Reporters Committee of 100 in Washington.)

> "The judge told us there are two times when a person should quit: when you're so far ahead you can't win any more, and when you're so far behind you've got nothing more to lose. He told my lawyer and me, 'You guys are in the latter category.'"

Perhaps more significantly, the paper's collapse has deprived Bridge of the immeasurable influence that a large-circulation journal can exert upon the machinations of public officials. Given the extended implications of his situation, some other influential newspaper or a television station might conceivably have fulfilled this function. The fact is many of the large papers and networks didn't begin to cover the story until Bridge had gone to jail.

The lack of prompt and widespread support from his media colleagues has puzzled and somewhat embittered Bridge. "I really don't understand it. A lot of people have told me they sympathize with me and all that, but, except for some scattered editorials of general support, nobody seems interested or concerned."

Equally disturbing to Bridge was the brushoff he got from editors in the New York City area who were familiar with his work: "A few months ago some of them seemed interested in hiring me, but now they don't seem to have any openings left. I get the distinct impression they don't want me to come around until this legal thing is over."

On September 26 the New Jersey Supreme Court voted against hearing Bridge's appeal. The next morning he returned to Judge Meanor's chambers and requested a brief stay in order to appeal his case to the U. S. Supreme Court. Meanor refused.

When I called Bridge that night, he sounded tired, even dismayed: "The judge called our appeal to the state supreme court a 'charade.' He told us that there are two times when a person should quit: when you're so far ahead you can't win any more, and when you're so far behind you've got nothing more to lose. The judge told my lawyer and me, 'You guys are in the latter category.'"

What happened then? I asked. "The judge denied our request for a stay, and they handcuffed me and took me to a detention cell. On the way out the court attendant turned to me and said, 'Everything's all right except free speech, huh?' I was in the cell with five convicted bookies for about four hours before my lawyer got another stay from the chief justice of the state." He paused for a moment. "You want to know something? What hurt me most was that there wasn't a reporter within miles of that courtroom!"

Gilhooly first appealed to U. S. Justice William J. Brennan, Jr., who is a former New Jersey Supreme Court judge. When Brennan refused to issue a stay, Gilhooly applied to Justice William O. Douglas, who took it before the full court on October 3 and cast the only affirmative vote.

At 9:30 the next morning Bridge, whose wife was expecting their third child any day, stood silently before Judge Meanor and listened while the court rejected his attorney's final application, this time for amelioration of sentence. "Mr. Bridge is a good citizen," the judge announced, "and he knows what he has to do to avoid going to jail." Moments later Bridge was led, handcuffed and clutching a crumpled roll of newspapers ("I forgot to bring any reading matter the last time," he whispered to me as the judge mounted the bench), out of the court to a cell in the Essex County jail.

Have you ever been tempted, I had blurted out to him on the telephone the night before, to just say the hell with it and go before the grand jury and purge yourself? "Not really. I'm still convinced I'm right, and I can't prostitute myself at this stage because I'm not sure I could live with myself if I did. Others behind me may compromise themselves, but I have no responsibility for them. I have responsibility only for myself, and I've put too many years into this business to turn my back on it now.

"Although," he hesitated, "I will say, I'm having some very serious thoughts about what kind of work I'm going to do when I get out of jail." □

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

All the arts are in Saturday Review/THE ARTS

A freeing of your imagination.

A challenge to your senses.

Today we are more open to our feelings. And the arts have opened up too.

They're no longer the exclusive property of concert halls and museums and critics who seem to write only for other critics.

The three B's, of course. But also jazz, pop and rock. And Roberta Flack Human Kindness Day.

The old masters, but also the baseball-glove chair, snorkel lamps, photographs by inmates of Sing Sing.

O'Neill, Williams and Miller. But also the year of the new playwrights.

In fact, the world of the arts has expanded so, even well-informed people scarcely recognize it. That's why it takes the whole of a magazine to cover it all.

That's why...

Saturday Review/THE ARTS

The new Saturday Review/THE ARTS has undertaken the pleasurable task of putting you in touch with everything that offers a respite from clichés.

Because the arts are highlighted by specific events, Saturday Review/THE ARTS will have eight regular departments: Cinema; Theater and Dance; Art; Entertainments; Architecture and Design; Music; Writing; and People and Ideas. It will also recommend books, television shows and other creative and performing arts.

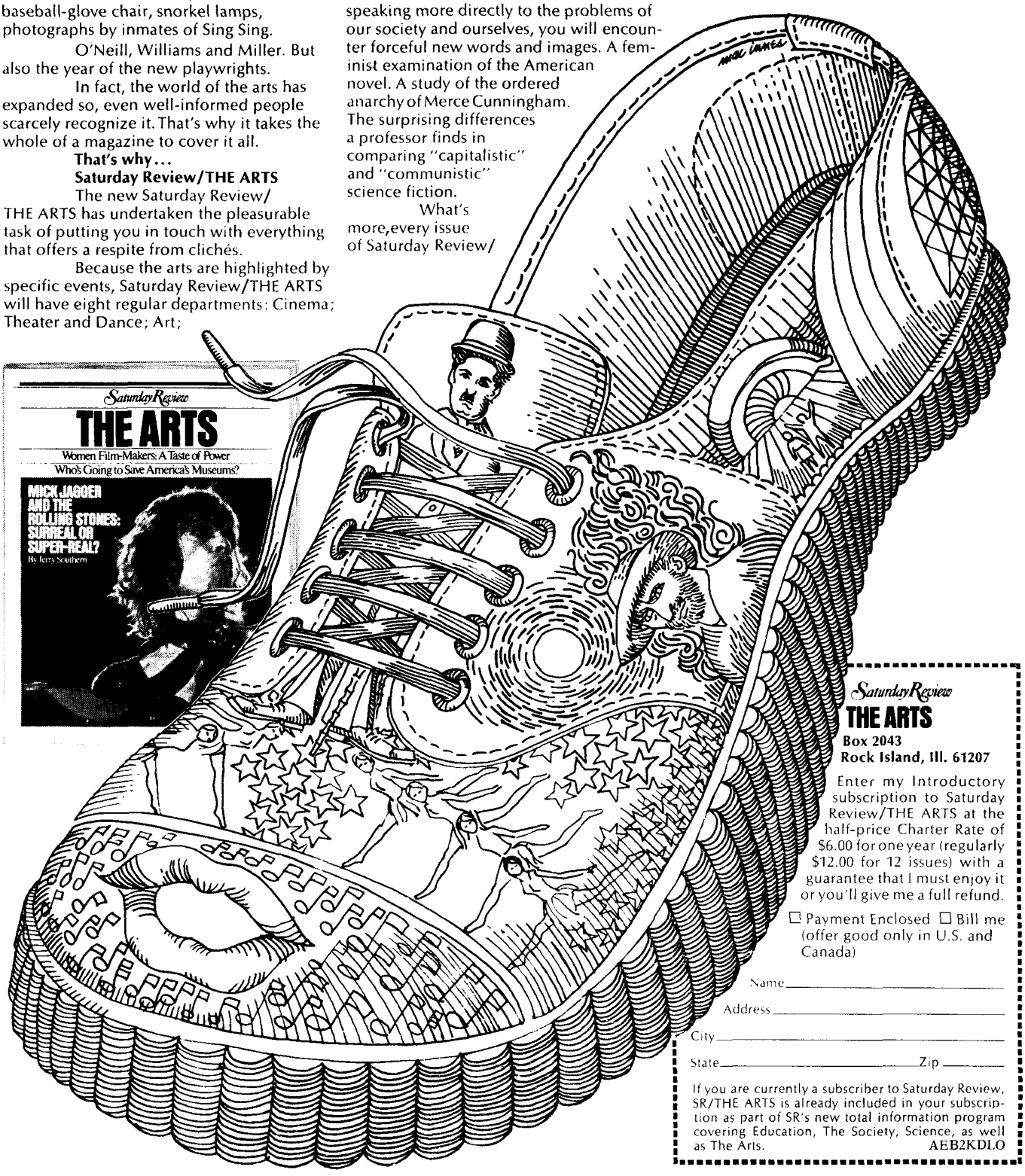
But because the arts are too restless today to be compartmentalized, much of Saturday Review/THE ARTS will deal with new forms and mixtures. The sleek new home appliances from Italy. Fiber sculpture. The world's leading behaviorist writing on "having" a poem.

And because artists and critics are speaking more directly to the problems of our society and ourselves, you will encounter forceful new words and images. A feminist examination of the American novel. A study of the ordered anarchy of Merce Cunningham. The surprising differences a professor finds in comparing "capitalistic" and "communistic" science fiction.

What's more, every issue of Saturday Review/THE ARTS is almost a work of art in itself—lavish with color, designed and illustrated by some of the finest artists and photographers today.

Special half-price Charter Rate

If you naturally gravitate to the "arts section," you ought to try the magazine devoted totally to the arts. Act now, and take advantage of the Introductory half-price Charter Rate: $6.00 for one year (regularly $12.00).


Saturday Review
THE ARTS
Women Film-Makers: A Taste of Power
Who's Going to Save America's Museums?
MICK JAGGER AND THE ROLLING STONES: SURREAL OR SUPER-REAL?
By Terry Southern

Saturday Review
THE ARTS
Box 2043
Rock Island, Ill. 61207

Enter my Introductory subscription to Saturday Review/THE ARTS at the half-price Charter Rate of $6.00 for one year (regularly $12.00 for 12 issues) with a guarantee that I must enjoy it or you'll give me a full refund.

☐ Payment Enclosed ☐ Bill me
(offer good only in U.S. and Canada)

Name_____

Address_____

City_____

State_____ Zip _____

If you are currently a subscriber to Saturday Review, SR/THE ARTS is already included in your subscription as part of SR's new total information program covering Education, The Society, Science, as well as The Arts.

AEB2KDLO

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Keep on Truckin' With Nixon

BY STEVEN V. ROBERTS

LOS ANGELES, Calif.—It was Saturday morning, and Robin Brooks was wearing blue ribbons in her pigtails, red knee socks, and a white football jersey with the name "Nixon" stenciled on it. At her feet yelped a small dog, also dressed in red, white, and blue. In her hand Robin clutched a precinct map and an instruction sheet that told her to knock on every door in her assigned area and say, "Hello, I'm ———, a volunteer working for President Nixon, and I'm conducting a survey . . . ."

Robin Brooks, nineteen years old and a freshman at Valley Community College, is one of thousands of young people who have been Slick for Dick this fall. (The Committee for the Re-election of the President estimates the number of Young Voters for the President to be around 350,000—a figure that is, presumably, sightly inflated.) I met Robin at the Nixon-for-President headquarters in Van Nuys, a white, suburban section of Los Angeles that tends to register Democratic but vote Republican. The McGovern campaign favors shabby storefronts for its local outposts; the Republicans of Van Nuys are ensconced in a suite of spotless offices that seem more appropriate for an insurance firm. On the wall a handmade Charlie Brown poster advises: "Work hard, but have fun, too.

I asked Robin how she had gotten involved in the campaign. "My parents are Democrats, but I registered Republican, and I got an invitation in the mail to volunteer," Robin said. "Then, all by myself, I went to a meeting of Young Voters for the President, and it was fan*tas*tic! Everything snowballed. I really got involved." But why with the Republicans? "I think President Nixon's trips to Peking and Moscow have been fan*tas*tic! Also, he's *positive* about his campaign. McGovern is so negative—everything is wrong; everything is bad. I love my country, and I'll always support the President as the President. I don't like anyone knocking our political leaders."

In the course of covering this campaign I've encountered dozens of YVPers. Calling them square is like calling Spiro Agnew outspoken. I haven't seen so many jumpers and short-sleeved white shirts since high school. As a rule these youngsters are well dressed and well mannered—and, almost without exception, white. Like the President, they are also scrappy, ambitious, and hard-working.

One of the main duties of these young volunteers is to canvass the electorate for basic information. The data they gather is then used to send out the appropriate sheaf of propaganda, enroll the unregistered, and bring out the vote on Election Day. In the McGovern campaign volunteers are sometimes encouraged to discuss issues with the people they visit and perhaps win over a convert. Nixonites never talk issues. They get their information, hand over a glossy brochure, and leave. Their whole spiel, from introductory hello to departing thank you, is spelled out on instruction sheets like the one Robin was holding.

The young workers also arrange for speakers, tables, posters, and other visible signs of Republican life on college campuses. Their third task is to provide an enthusiastic, well-scrubbed background for the Presidential Presence. Mr. Nixon has always been rankled by the charge that he does not appeal to youth, and a claque of cheering admirers is as useful as pancake make-up and a deftly ghosted ad lib. The tactical use of the young was frequently demonstrated during President Nixon's swing through California early this month. For example, 1,500 Young Voters for the President were bused to the Century Plaza Hotel in Los Angeles, where the Committee for the Re-election of the President was holding a fund-raising dinner. When Mr. Nixon stepped out of his helicopter, they staged a "spontaneous" welcome demonstration. The TV cameras churned away. While the President dined with a select group of supporters who had paid $1000 a plate for their meal, the youngsters were fed supper on the hotel patio. Outside the Century Plaza a large peace demonstration was taking place, which threatened to grab a sizable chunk of air time. So, on several occasions during the evening, television crews were allowed into the party and out onto the patio, where the young Nixonites dutifully exuded enthusiasm. As Robin Brooks might have said, it was fan*tas*tic. They belonged, they were a part of something, and it did not seem to matter much if they were manipulated a little.

Leaders of the Nixon cadre try to come across as loose and cool. One poster taped on the wall at YVP's Los Angeles headquarters on Wilshire Boulevard shows the famous R. Crumb cartoon characters and bears the caption: "Let's Keep On Truckin', Vote Nixon." Another shows a couple clinging to each other on a lonely beach, accompanied by a one-word caption: "Love." The impression given is of a room decorated by a teenager who listens to Rod McKuen. In conversation with an outsider the leaders' moods alternate between suspicion and self-satisfaction. I was all the more startled, then, when one young worker confessed to me in hushed tones that "John Mitchell is just the kind of person who *would* bug the Watergate."

Tom Hayden, the thirty-one-year-old California state chairman of Young Voters for the President, (*not* the radical Tom Hayden) was wearing a flowered shirt and flared pants on the day I talked with him. His hair curls neatly just over his ears. After greeting me with a handshake that left my hand numb, Hayden explained that the campaign was taking a "two-pronged approach" to the youth vote. (In the course of our conversation he casually mentioned that he had been an all-American track star in college and the most decorated civilian ever to serve in Vietnam—as an advisor for the U.S. Agency for International Development, he organized the first successful civilian militia in South Vietnam.) When he spoke on campus, Hayden said, he stressed the Nixon record, particularly such things as the "peace initiatives," the trips to Russia and China, the termination of the draft, and the creation of the Environmental Protection Agency. The second prong is aimed squarely at George McGovern. "McGovern's credibility," Hayden asserted, "is really the issue that in itself could cost McGovern the youth vote."

To judge from my experience, Hayden has a point: Distrust of McGovern—much of it caused by the senator's handling of the Eagleton affair or by what they consider to be McGovern's "wishy-washy" behavior—has turned a lot of young people around. They may not admire the President, but, as one volunteer said, "At least with Tricky Dick you know what you're getting."

Other YVPers support Nixon because they were raised as Republicans. Party loyalty is clearly collapsing, but the closer a youngster is to his family, the stronger the ties remain. At Long Beach State University upperclassmen registered about four-to-one Democrat, while among freshmen the ratio was only three-to-two.

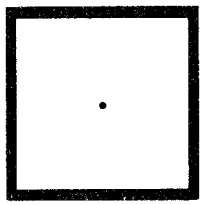
Another element of Nixon's strength is based on issues. Some young voters mention the President's imposition of wage and price controls, for example, or his defense policies. As for the war, the majority of YVP members I've talked to are convinced that it was

Steven V. Roberts is the Los Angeles bureau chief of the New York Times.

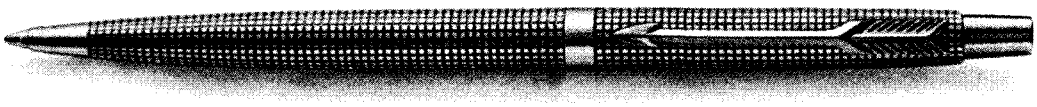
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

© 1972 THE PARKER PEN COMPANY, JANESVILLE, WISCONSIN, U.S.A.

Ball point shown actual size.



It takes three weeks just to make the point.



Parker 75 Classic Ball Pen.

We don't consider it a plus that it takes us so long. Really, we'd like to cut the time down. But how well a ball pen writes depends on the ball itself.

It took us five years to come up with the ball we wanted. We knew it had to be extremely hard. The answer, and we were first to find it, was tungsten carbide. But the major problem was the exquisite roundness we required, coupled with the need for a microscopically-textured surface so the ball would not slip or skip, but would grip the paper readily, on the lightest contact.

Much of how we accomplished this is, frankly, a secret. To this day, less than a dozen of our own people know exactly how we do it. We can tell you this. When we fit this ball precisely to a stainless steel socket, we achieve a "working end" which is superbly resistant to corrosion and wear.

This entire point assembly, when snugged into the nose of a sterling silver case, becomes the Parker 75 Classic Ball Pen.

You'll find it inscribes a clean, crisp track. Almost without effort. And you'll find that this sleek, sterling silver column has an almost ideal heft and balance, through hours of comfortable writing.

There is so much ink in this pen and it is fed to the tip so efficiently, the Parker 75 Classic writes better months longer—three times longer than the ordinary ballpoint.

Naturally this pen bears a written guarantee. If it fails to perform due to defects in materials or workmanship during its owner's lifetime, we will repair or replace it—free.

The Parker 75 Classic. It is an uncommon gift. Its cost, monogrammed, is $12. Someone you're fond of deserves it.

PARKER
World's most wanted pens

The Parker 75 Classic Ball Pen in solid sterling silver is $12. Also available in vermeil, $25; 22K gold electroplate, $8.50; brushed stainless steel, $5. Matching pencils. You'll find the famous arrow clip on every Parker, from the $1.98 Jotter Ball Pen to the $150 Parker 75 Presidential Pen.

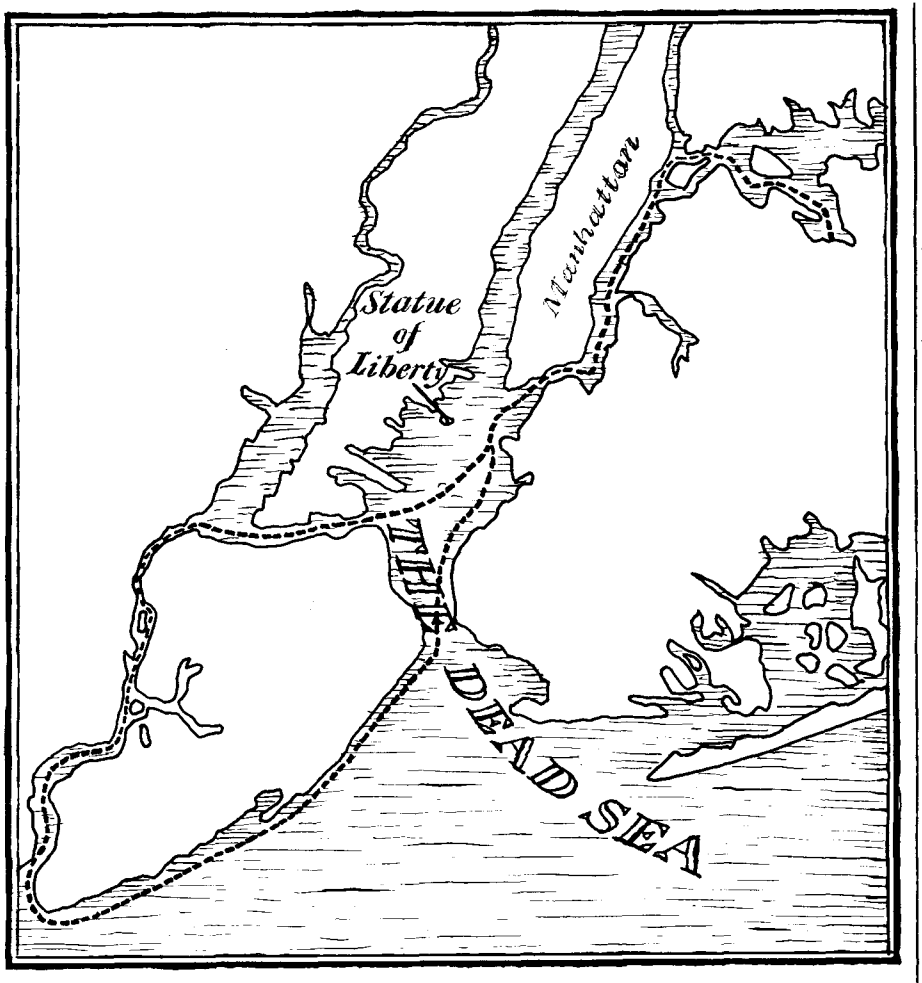
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

talked to are convinced that it was necessary to salvage American "honor." And, now that the threat of the draft has dissipated, many find the whole war issue boring and academic.

Robin Brooks mentioned a fourth reason for supporting Nixon—the desire to believe in and support the nation's leaders. This impulse is often combined with a curious defeatism, if not cynicism. Many youthful Nixon supporters do not believe that social change is really possible—or desirable. They scorn "idealists." As I wandered around the campus of Long Beach State University recently, I heard echoes of this feeling from half-a-dozen students. One was Sue Bakken, a twenty-one-year-old senior, who said, "I don't think McGovern's proposed economic policy can work. And as for the war, it would be great if we could pull out in ninety days, but I don't know if it's possible." Tim Ryan, a junior, added: "We don't need someone with a lot of new ideas; the country's got enough problems right now." Sometimes the rhetoric sounds as if it were coming from left-wing radicals. Candi Lesher, a nineteen-year-old Nixon partisan, put it this way: "McGovern's going about it all wrong. He thinks he's making a big liberal approach to youth. Rip, rah! The war will end instantly! Everyone will have all sorts of money! Anyone who takes him seriously is not using his brain. I told my mother," Candi added, "an honest man couldn't be President, and she just about died: Saying that is treason."

A sentiment frequently expressed by Young Voters for the President is that many youngsters who support McGovern do so because it is the peer-group thing to do. "Everybody else is for McGovern, so they have to be, too," snapped Bob Brass, a seventeen-year-old member of Robin Brooks's canvassing team. Lynn Garret, a fifteen-year-old volunteer who was wearing a heart-shaped locket, called her teachers "one-sided. Most of the kids," she said, "have been brainwashed."

The McGovern campaign can trace its heritage to the civil rights movement, the antiwar campaigns, the McCarthy and Kennedy crusade of 1968. But those movements have never included all young people, or even a majority of them. All during those years, while the nightly news recorded the exploits of Mark Rudd and Jerry Rubin and the other Tom Hayden, things went on elsewhere. Few students emerged completely untouched by the Sixties, but for a great many of them youth still meant fraternities, not communes; beer, not pot; allegiance, not alienation. Young Voters for the President is sort of a flowering of that other America. □



Voyage to a Dead Sea

BY MIKE JAHN

NEW YORK, N. Y.—Milton Hyms is a master of outrage, possessor of a truly towering sense of indignation, one he couples well with his love of water and boats. Some thirty years ago Hyms walked away from a master's degree in sociology to work on the Staten Island ferry; now he is the man in charge of the *Harbor Survey*, an ex-admiral's forty-foot launch that serves as the research vessel of this city's Environmental Protection Administration. Four times a week *Harbor Survey* makes an eleven-hour tour of New York harbor to check up on water pollution for the EPA's departments of Air and Water Resources.

I joined one such expedition early on a recent Tuesday morning as the boat was preparing to leave the World's Fair Marina in Flushing Bay, where it is berthed next to a private yacht named *Soul at Sunrise*. While Hyms directed the course, cooked breakfast, and offered narrative, the *Harbor Survey*'s captain, a Norwegian named Reidar Kristiansen, steered the craft from the marina, turned stern to nearby Shea Stadium, and skirted north of La Guardia Airport toward Hell's Gate and the East River. We had shoved off at 6 a.m. and were to pick up two chemists at Owl's Head Park in Bay Ridge, Brooklyn, around 8. The chemists would sample the water and produce statistical evidence of the indignities inflicted daily on New York Harbor.

Hyms, a handsome man with a dark tan and a fine mustache, expresses his opinions the moment they pop into his head, most often in colorful terms. "Venal sons of bitches" is his favorite epithet for polluters, and he applies it to dozens of them as the day wears on.

We pass rotting piers and half-sunk wrecks. By the time we reach Ward's Island, where the industrial waste division of the Water Resources Depart-

Mike Jahn is a freelance writer who has spent much of his life on or near cleaner waters than those he explores here.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Our children are born into greatness.

In the Almadén region of California, our wines are blessed with a noble ancestry.

Because here, in the Paicines mountain vineyards, near San Juan Bautista, a cooling Pacific breeze gives Almadén grapes a rare ambiance for growing into exquisite wines. Such as Pinot Noir. Or Gamay Beaujolais. Pinot Chardonnay. Or any of 26 types of magnificent wines, born and raised much like the Franciscan friars raised *their* wines in this region over 100 years ago.

Come and share our family.
Come to Almadén.

AlmadénWines
A family of fine wines since 1852.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ment is located, Hyms has consumed a breakfast of hot cakes and lambasted the Astoria Con Edison plant. He points out several tankers moored at Ward's Island, each bearing the same EPA emblem as the *Harbor Survey*. "That's 'Lindsay's Navy,'" Hyms says. "They're the sludge boats. The city's sewage treatment plants have two kinds of discharge: the liquid effluent, which is theoretically harmless and is discharged into the harbor, and the sludge, which is pumped into the tankers, taken four miles past Ambrose Light into the Atlantic, and dumped."

Leaving the tankers astern, we slip through Hell's Gate and its strange whirlpools, caused by the joining of the Harlem and East rivers and Long Island Sound, and head down the East River. It is a strange sensation to ride on these waters in a small boat. Looking at the city is like watching a movie whose sound has gone dead. You can hear nothing, save the boat's engine. Not a car, though you can see thousands; not a bus or subway, except when one goes over a bridge you happen to be under—then it becomes a hollow, metallic roar. Nothing but the engine and the sound of spray.

The east bank of the East River is lined with industrial plants, many of which, Hyms tells me, discharge waste into the water at night ("the venal sons of bitches") to avoid detection by municipal and Coast Guard patrol boats. By the time we make Owl's Head Park to pick up chemists Herb Berkowitz and Clint Morris, Hyms has reached a fine state of indignation. The chemists disappear into the galley, change into old clothes, and sit down to a breakfast of bagels and cream cheese as *Harbor Survey* heads toward Robbins Reef, north of Staten Island. This is the first water-sampling station on the Tuesday run. Tomorrow the boat will follow a different course.

Berkowitz and Morris do their testing in the aft compartment, which once held the admiral but which is now outfitted with sinks and racks that hold beakers, bottles, and hundreds of test tubes. At each sampling station—a preset location near a buoy, under a bridge, or off a dock—the chemists drop long metal tubes into the water, then haul in samples from the surface and the bottom. These are analyzed for temperature, salinity, coliform (human waste bacteria), dissolved oxygen, and the amount of oxygen needed to allow the breakdown of the coliform. Dissolved oxygen is the key, for it is the basic measure of whether the water can support life. As we work our way west through Kill Van Kull, north of Staten Island, the amount of dissolved oxygen drops steadily. The water changes from the blue-green of the upper bay to a nondescript brown. Farther into the Kills the surface becomes shiny, breaking up the sunlight into a spectrum of shimmery hues. "We seem to have a little oil slick here," Berkowitz notes.

"This is one of the worst places," Berkowitz says. "Are there any fish here?" I ask him. "No, there's too little oxygen." "Is there any life at all?" "There may be *something*, but I can't imagine what."

The Kills that separate Staten Island from New Jersey are less a waterway than a moat. The island side is rimmed with boatyards and freighter ports; the Jersey side is a solid wall of oil refineries and chemical plants. The moat does not do a very good job of protecting the island from New Jersey. The dissolved-oxygen reading continues to plummet.

We pass Shooter's Island—a hunk of marshland in the middle of the Kills that is rimmed with derelict boats and rotting docks—then head south down the Kills, west of Staten Island. Stretches of this section are named after oil companies, and the water, which turns from brown to sickening beige, smells like cleaning fluid. We take samples in Arthur Kill, under the B&O railroad bridge.

"This is one of the worst places," Berkowitz says. The dissolved-oxygen content proves to be less than one-fourth that of the day's best.

"Are there any fish here?" I ask him.

"No, there's too little oxygen."

"Is there any life at all?"

"There may be *something*, but I can't imagine what."

As we continue through the Kills, the odor changes with each plant. The oil on the surface becomes more apparent; its colors grow lovelier as the stench increases. "That copper plant there," says Hyms, "they drop copper sulfate and other byproducts into the water. They won't do it now because they know that we and the Coast Guard are watching. The bastards do it at night." Every 100 yards or so there is a sign facing the water, reading, "Dangerous cargo area. No smoking. No open lights."

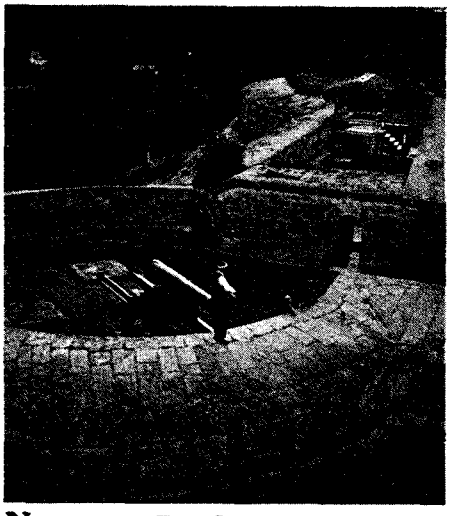
We pass the dock of a chemical plant, to which is tied a barge called *Sparkling Waters*. Berkowitz breaks up, then turns serious and sniffs the air. It smells like Lysol. "They load all kinds of stuff here," he says. "Every time you come by there's a different odor. The Jersey shore," states Hyms, "is responsible for most of the pollution in New York Harbor."

We proceed from the refineries and chemical plants to a spot off the Jersey shore near Laurence Harbor to check on the discharge from a huge sewage plant nearby. The effluent, which comes from four huge pipes on the bottom, boils upward, causing four circular scars on the surface. The launch chugs slowly in a northeasterly direction across Raritan Bay. A medium fog moves in as we bounce through the wake of the *Hess Voyager*, a huge oil tanker, on our way toward the lower Manhattan bay. At Old Orchard Shoals Light we get our best readings of the day. Then we head for the last stop, directly under the Verrazano-Narrows Bridge. In the harbor proper, dozens of boats in dozens of sizes are going in all directions. The *Newtown Creek*, the flagship of Lindsay's Navy, is returning from a trip to the sludge-dumping grounds. A Coast Guard boat inches along the Brooklyn waterfront, checking for illegal discharges. We dock at Owl's Head Park. The chemists leave, taking two wooden crates of test tubes filled with the day's water samples.

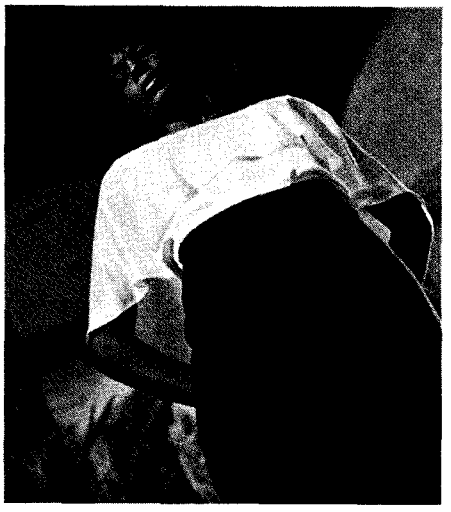
The circumnavigation of Staten Island has yielded the usual pattern of pollution: "Not bad" north of Staten Island; worsening until the low point is reached west of the island; fair at Raritan Bay; quite clean at Orchard Light, on the edge of the Atlantic; if not good in New York harbor, at least not so poor as in the early 1950s.

The chemists gone, the *Harbor Survey* starts off on the two-hour return trip to its berth in Flushing Bay. Hyms is eager to get back fast because there's a Mets game at Shea Stadium that night and he doesn't want to get stuck in the traffic. The boat is delayed, though, when a fuel-line filter clogs and the engine stalls. Cussing and moaning—the filter was bought a month ago—he climbs down a hatch into the engine compartment, changes filters, and then emerges holding the old one high to show the dirt: "The venal sons of bitches, they not only dump their crud into the harbor, they have the nerve to sabotage the *Harbor Survey* with dirty fuel." □

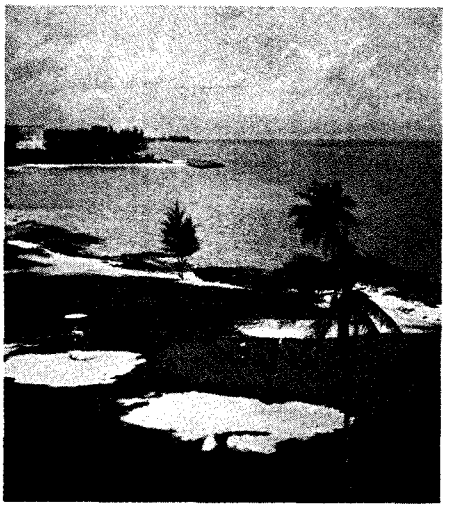
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



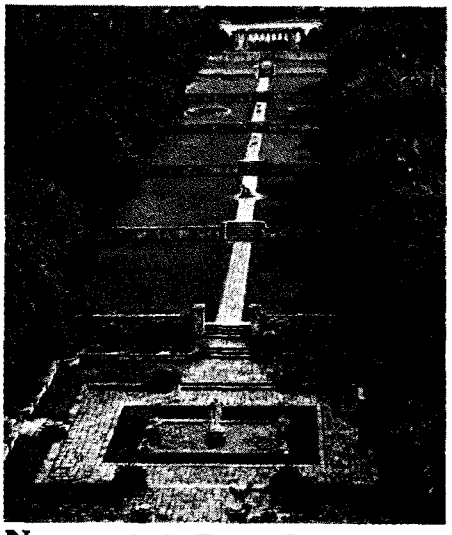
Nassau is Fort Charlotte by day and a Sound and Light Drama by night.



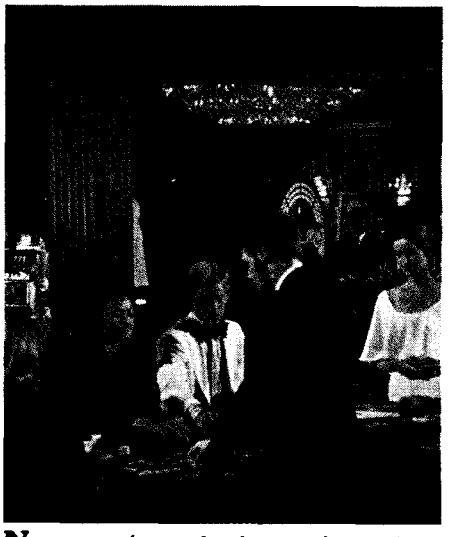
Nassau is a fashion show featuring the most beautiful girls in the islands.



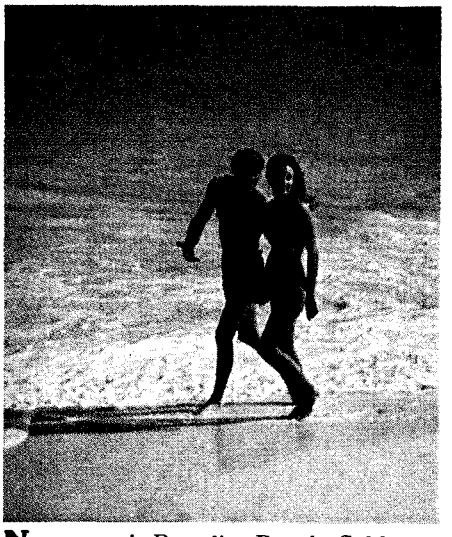
Nassau is four 18-hole championship golf courses and a 9-hole for night play.



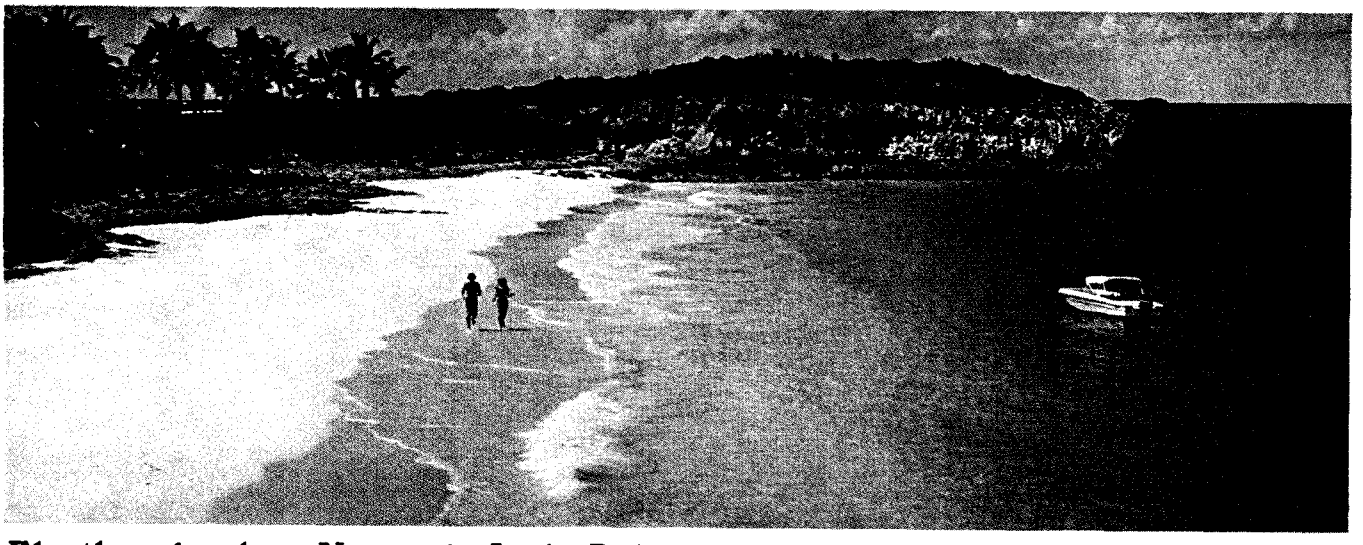
Nassau is the French Cloister and Versailles Gardens on Paradise Island.



Nassau is a red velvet casino and a flame red fire dancer.



Nassau is Paradise Beach. Cabbage Beach. Cable Beach. And Love Beach.

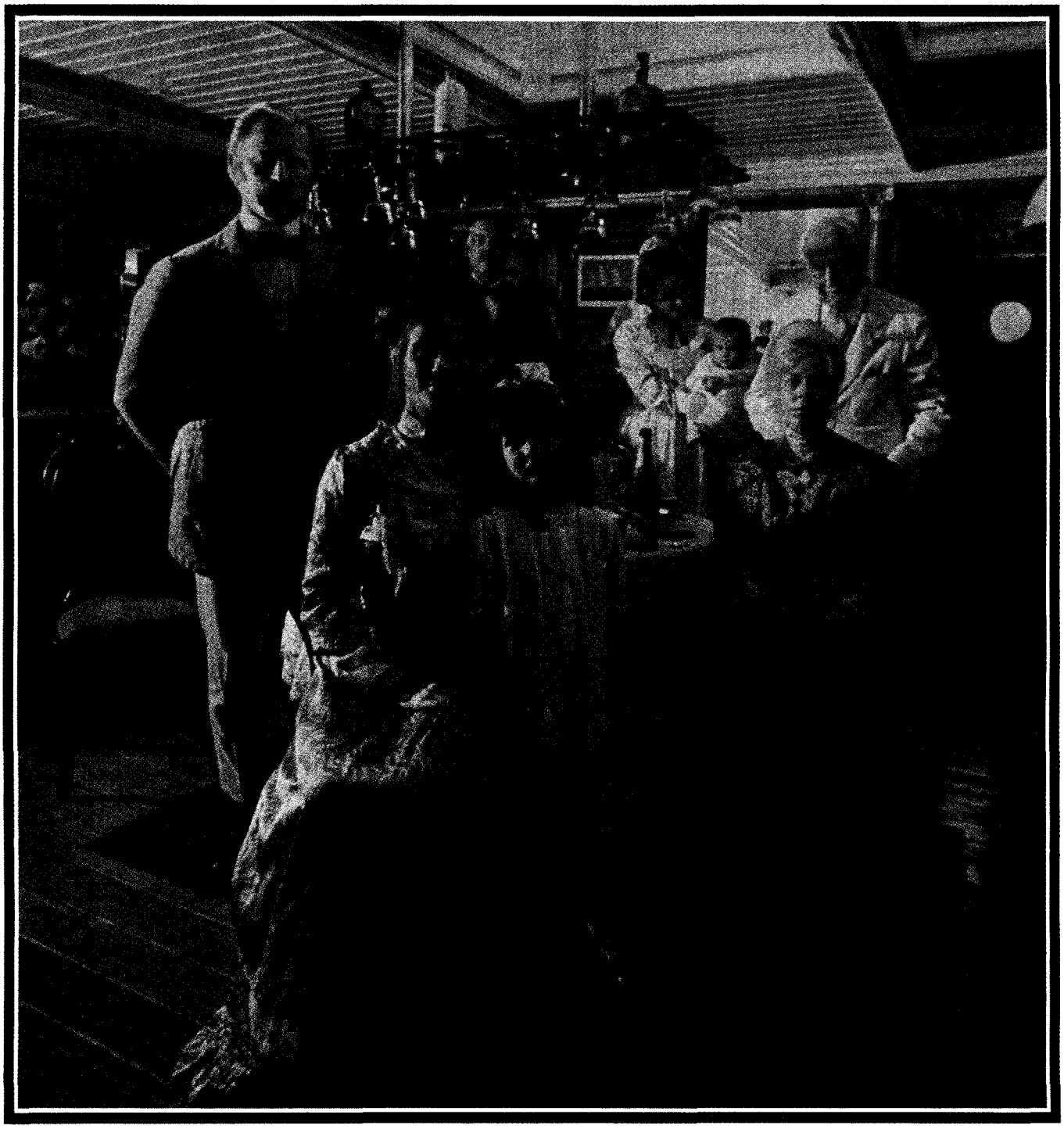


Eleuthera is where Nassau is. In the Bahamas. Eleuthera is just one of the 700 Bahama Out Islands. 100 miles of pink sand beach. Pastel villages. A mile-long cave that looks like an underground cathedral. Sapodillas and breadfruit bread. Delicious. When you come to the Bahamas, you come to a sea of islands. Only 50 miles off the Florida coast. Once you are there, you can have it quiet. Or not so quiet. Or not quiet at all. And all you have to do is see your travel agent.

The Bahamas. Not out of the way. Just out of this world.

Bahama Islands Tourist Office, 200 Southeast First Street, Miami, Florida 33131

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



It was Deauville, Monte Carlo, The Grand Tour, and Mumm was the word.

The era is gone.
Except for us.
Today you can still buy
the finest champagne
the world has ever known.

Mumm's the word.
Always will be.

IMPORTED BY BROWNE VINTNERS COMPANY, NEW YORK, N.Y.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Red Star Over San Francisco

BY MIN S. YEE

SAN FRANCISCO, Calif.—The cool wind that swept over Portsmouth Square in San Francisco's Chinatown on October 1 snapped bright red flags and scarlet bunting, twisted and turned the deep maroon placards. For the populace of this ghetto community—the largest Chinese settlement outside Asia—October 1 was not just another early autumn Sunday. It was the first time they had ever publicly celebrated China's "liberation," an event that took place twenty-three years ago. America had never witnessed a celebration like it. Loudspeakers blared the melodious strains of "The East Is Red" and the more militant tempos of the "Internationale"; the throng of about 1,200 people chanted "*Mao Zhu Xi wan sui!*" and "*Zhong Mei ren min you hao wan sui!*" ("Long live Chairman Mao!" "Long live the friendship of the Chinese and American peoples!")

Old and young alike had come to the tree-lined park for the occasion. Most of the elderly wore suits and ties. Some of the youths were wearing bright blue, cotton Mao tunics. Standing ramrod-straight, they searched the crowd for die-hard supporters of Chiang Kai-shek. (Disruptions were expected; none occurred.) A few dozen Caucasians had turned up for the event. A distinct minority, they kept to the rear of the crowd. Their casual dress irked a number of the older Chinese—jeans and rumpled or torn shirts were not considered proper attire on this Chinese national day.

The park paths leading to the speakers' area were flanked by two photo exhibits set up by the Joint Committee to Celebrate the Twenty-third Anniversary of the People's Republic of China, a group of Chinese-American lawyers, bankers, restaurant owners, curio-shop managers, and liberal and radical youths. (Chinese in America who are more sympathetic to the mainland government than to the Chiang regime are not secret Communists working for the overthrow of this society. The ties, which run deep, are more familial and cultural than anything else, although there is also an immense pride here in China's new egalitarian society.) One display depicted the Nationalists, under Chiang Kai-shek's leadership, as having favored large landowners and foreign capitalists, while the common people starved or were slaughtered in great numbers. The other showed scenes of modern factories and communes, villages and cities, homes and offices, all demonstrating the great strides in technology and human welfare that have been made since Chiang was forced off the mainland. China's advances since liberation were not exactly news to Chinatown residents, but this was the first time that they could look at and discuss such photographs in public.

There were a few cynics in the crowd. One elderly gent remarked that, the day before, he had dutifully attended a memorial service for Chiang's Nationalists. When asked why, he shrugged and said, "It's not wise to take chances."

Some of the older participants had tried to celebrate October 1 once before—on the day the People's Republic of China was founded in 1949. But that event, a Chinese-only program held inside the meeting hall of the Chinese-American Citizens Alliance (CACA) came to an abrupt end when a squad of Nationalist goons rushed into the auditorium and proceeded to beat up speakers and listeners alike. Subsequently, progressive Chinese kept a very low profile. (For a time in the repressive Fifties the FBI regularly placed advertisements in Chinatown newspapers asking civic-minded citizens to report anyone they suspected of being pro-Communist.) Then came President Nixon's visit to Peking.

The President's avowed goal of "normalizing" relations with the People's Republic of China opened the floodgates of Chinese attachment to the motherland and made it easier for Chinese to express their feelings about the changes that have taken place in mainland China. "For the first time we are not afraid," said Maurice Chuck, a progressive, thirty-seven-year-old Chinatown newspaper publisher, who, as a teen-ager, watched Chiang's Kuomintang bullies break heads and arms in the CACA hall.

On the evening of October 1 an overflow crowd of 2,500 Chinese-Americans jammed the Masonic Auditorium on the crest of fashionable Nob Hill to hear more speeches and to see *The Red Lantern*, a film of the revolutionary Peking opera about the war of resistance against Japan. Although older Chinese generally bear a deep hatred for Japanese, the showing of this film raised a few eyebrows because only a few days earlier Japan and China had agreed to establish diplomatic relations.

Chinese-Americans have long endured Kuomintang rallies, at which the audience quietly listens to platitudinous speakers tell how Chiang will one day "return to the mainland" and is then asked to fill the offertory plates being passed around. On October 1, however, if a speaker talked too long, he was rhythmically applauded off the stage. Sometimes the crowd didn't agree with a speaker. One Chinese businessman tried to compare Taiwan and China by telling a story about his wife's visit to Taiwan and his own visit to the mainland. His wife, he said, had been awakened in a Taiwan hotel five times one night by "masseurs and masseuses" eager to provide their services. In his hotel in Canton, the man said, he had not been awakened once. Smiling, he added that he had been disappointed. He was roundly booed.

Another speaker, William L. Hu, an IBM computer engineer from San Jose, began his talk by saying that he generally kept away from Chinatown because it was so corrupt, manipulated—as it was and still is—by a few "Uncle Tong" businessmen hand-picked for community leadership by the generalissimo himself. But today, said Hu, "is the day we stand up." The crowd punctuated his speech with roars of approval. □

Min S. Yee is a former Newsweek *staffer who lives in San Francisco.*

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The blackboard is obsolete.

For 500 years, teachers have been standing in front of their classes, writing with chalk on a blackboard.

Today's teacher has another choice. She can drop a videocassette into a little machine.

Instantly, the lesson she wants to teach appears on a TV set in front of the class—in color,

*Trademark of Sony Corp.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

motion and sound.

And you know how kids absorb television.

Learning by watching TV! It's a dream-come-true for our television-reared generation of youngsters.

It's a dream-come-true for our teachers.

Because, until now, classroom TV hasn't been very flexible. With over-the-air programs—whatever was on, was on.

If the teacher wanted to do Verb Endings, but that morning's program was on Vowel Sounds—too bad.

The Sony U-matic Videocassette System lets her decide.

What should be watched. And when. And how often. And by whom.

That works right in with the trend to "open classrooms"—small groups within each class learning at their own levels.

What equipment is needed? Aside from a TV set—any TV set—just a U-matic Videocassette machine.

You plug it into the TV set. Drop a book-sized cassette into the machine. And the program's on.

The videocassettes can be bought or rented from dozens of educational distributors.

Already there are thousands of titles—from Mother Goose to Sex Education.

Most exciting of all, the machine can record your own program—like a science show or a school play—on a blank videocassette.

You use an inexpensive TV camera, and you can play the cassette back immediately.

Like books (and unlike educational broadcasts) cassettes can be stored for reference.

Like books, they can be sent through the mail.

Imagine what they can do for kids unable to attend classes.

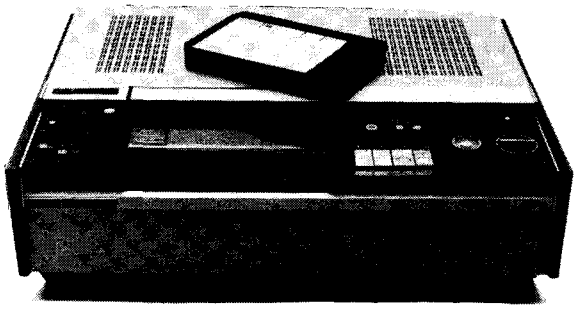
For teacherless study in high school and college.

For "correspondence courses" that are just like being there.

In a few years, perhaps, there'll be a U-matic in every living room.

You'll walk in and see your kid glued to the TV set.

You'll smile and tiptoe out. He's doing his Math homework.



THE SONY® U-MATIC*

color videocassette system

For more information, write Sony Corporation of America, Video Products Dept., 47-47 Van Dam St., Long Island City, N.Y. 11101.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Blind Dinner

BY JACK STAR

CHICAGO, Ill.—The blindfold presses down tightly on my eyelids as I grope unsuccessfully along the dinner table for my salad fork. My hand dunks into the Italian dressing. "You'll do better to just let your fingers brush lightly around your place setting," the blind man at my left advises.

In a banquet room at a Michigan Avenue hotel the twenty-minute opening exercise of a symposium on "Attitudes Toward Blindness," sponsored by the American Foundation for the Blind (AFB), is taking place. At each of twelve round tables a sighted person wearing a blindfold is struggling through a meal with a blind person as his guide while a social worker marks down reactions on a mimeographed form. This is an experiment in role reversal.

Before sitting down, I had a drink with M. Robert Barnett, executive director of the AFB, who was blinded by a blast from a Florida orchardman's shotgun when, at the age of sixteen, he was stealing oranges. "Society cripples blind persons," Barnett told me. "A person who is blind is regarded as less than a person."

He went on to say that blindness most often strikes after the age of fifty (47.2 per cent of the blind are sixty-five or over; 29.5 per cent are between forty and sixty-four). "Because of society's attitudes," Barnett said, "such persons are relegated to armchairs. This conference is designed to probe these attitudes."

My guide at the dinner table is a sixty-year-old insurance agent from Goshen, Indiana, a pleasant, easy-going man named Ronald W. Workman, whose eyes began to go bad twenty years ago with a degenerative disease called choroideremia. Two years ago he could see nothing except the difference between light and dark.

Leaning over, Workman feels my blindfold to make sure it shuts out light. To my astonishment, I realize that it also shuts out sounds: Now that I can no longer see the four women sitting across from me, I have trouble hearing them. My world consists of Ron Workman, sitting at my left, and Reverend Jackson, a black minister who has been blind for seven years, at Workman's left. Isolation.

"When the waiter brings the meal," Workman instructs me, "ask him to describe the food on your plate, using the face of a clock as reference points. Like, 'potatoes at twelve o'clock, carrots at six o'clock, roast beef in the middle.' Then you'll be able to find what you want on your plate." Right now I'm having a hard time finding the water glass. In a calm voice Workman tells me it's undoubtedly to the right of my plate. I panic. No water glass. Suddenly I find it to the left of my plate, and I nearly knock it into my lap, making the discovery. Who put it there? I am irritated. Workman laughs: "Sighted people are always trying to screw up us blind people."

Later Workman asks, "How did you do with your fruit cocktail?" I feel around in the cup with my right forefinger. "I missed one piece," I report. "Next time you eat fruit cocktail try using your fork," Workman says. "It's easier to spear the individual pieces than to catch them with a spoon."

I hear a strange, unfamiliar whine. "It's the dogs," Workman explains. "What dogs?" I ask, disconcerted. "Under the table," he answers. "Two guide dogs. They belong to Reverend Jackson and the lady next to him." I reach under the table and touch two wet, friendly snouts. Until this moment I have been unaware of the dogs' presence.

Reverend Jackson announces that he is passing the relish plate, thoughtfully warning that there is a lot of water on the bottom of it. I pass the plate on quickly, fearful of drenching myself. "Don't you want an olive or some celery?" Workman asks. "Too much trouble," I reply.

Workman tells me that seven years ago, when he could still see, he went to a special school. "They blindfolded me for fifteen weeks. Overnight my whole world was wiped out by the blindfold. So I know how you feel now."

"Has the whole experience been pretty terrible?" I ask Workman. "A little traumatic," he answers. "But I was already prepared for it. I had learned how to get around by myself with this cane. Some people prefer dogs, but I travel too much to depend on a dog. I kept going with my insurance business. I have three employees in my office—what you call a one-man agency."

"You were lucky to have a profession like that," I suggest. "Yes," Workman answers. "If I'd been a truck driver, I'd have been out of a job."

I ask him how he gets around Goshen. "Smelling is very important," Workman replies. "When you walk down the street, you can tell the difference between a bakery and a tobacco shop. And hearing is crucial. Tapping with my cane, I can 'hear' an alley before I come to it, and then I feel the wind blowing down the alley, so I know I'm there. I walk by a door, and I can 'hear' that, too. I can tell if I'm coming to streets or shrubbery; they have a completely different sound. I don't worry much about falling. The cane saves me from tripping over some kid's bicycle or roller skates."

Reverend Jackson breaks in: " 'Bout the only thing you *can't* do is tell a pretty girl from an ugly one." Workman agrees: "That's true, but that sort of evens up everybody in the world. When you're blind, beauty is in the *mind* of the beholder."

Startled, I feel somebody brush past me. "It's only the waiter," Workman reassures me. "How you doing on your salad?" I allow that my table manners must be terrible, because I'm using two fingers of my left hand to shove bits of lettuce onto the fork in my right hand. "Use a piece of bread instead," Workman instructs me. He tells me that fried chicken is popular with blind folks because "you can hold it in your hand."

I can't find my fork again. Workman says: "It should be there, somewhere to the right. Don't tell me the waiter took it away. No, there it is. Don't hesitate to ask for help. I don't when I'm in trouble. Of course, some people are *too* helpful. I tell them I appreciate their help, but that I can manage."

Workman makes me stand up to try out the unusual experimental glasses he is wearing. They were developed by a New Zealand scientist, Workman tells me, and his are one of about only two dozen pairs in the United States. A transducer in the bridge sends out a batlike ultrasonic peeping that is reflected off objects in front of a blind person and transmitted back to two other transducers in the glasses. Sounds, varying in pitch and intensity, are transmitted to the blind person through tiny earphones that project from the glasses.

"When I'm walking down the street," Workman explains, "these glasses help me detect a brick wall or an automobile fifteen feet ahead." We start walking across the ballroom floor; the peep-peeping in my ears becomes frantic, then turns to a low hum as I come within touching distance of what I later discover is a room divider.

I marvel at Workman's gadget. Science, wonderful science, may someday vastly improve the blind man's lot. But for now, I think, the courage he carries inside him is his best resource. As for myself, I am relieved, when the signal comes, to tear off the blindfold and to be able to see Ron Workman as I shake his hand. □

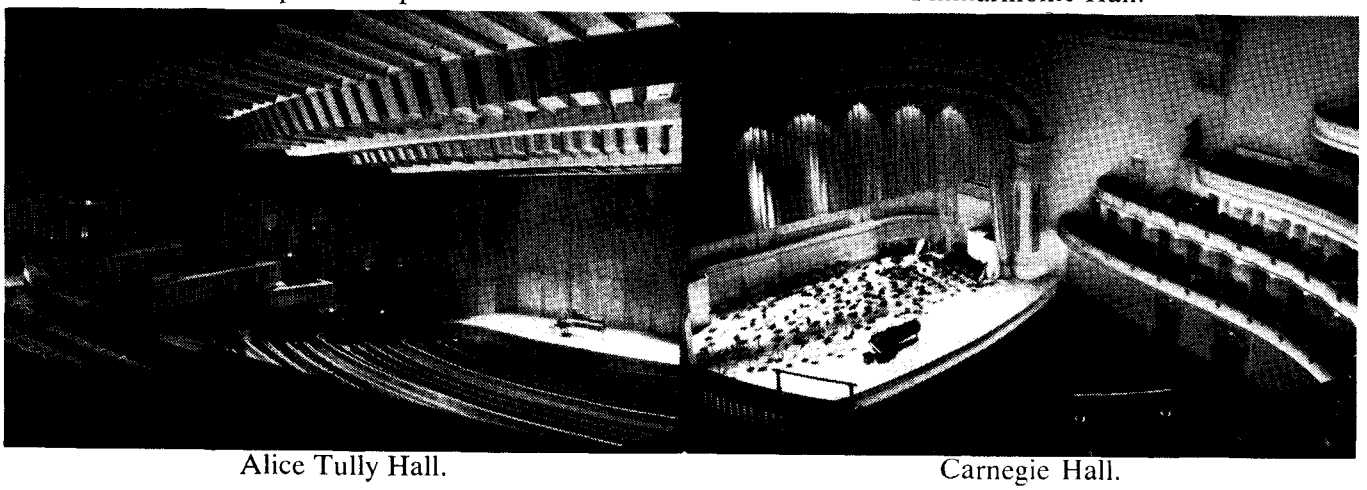
Jack Star is a Chicago magazine writer.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

An important notice to all executives who would like their companies to be thought of as big, successful, prestigious, first-rate, tasteful, wise, exceptional, worthy, humane, committed, civilized, and promising.

These places are available for advertising.

The Metropolitan Opera House. Philharmonic Hall.



Alice Tully Hall. Carnegie Hall.

Advertising appearing in these places will be saying great things about your company to the most consequential group of thought shapers, business heads, and stock owners in America. Indeed, they're the world's greatest audience for your company's advertising.

It's a large audience, too. Over 400,000 people read Saturday Review Programs each month, at Lincoln Center and Carnegie Hall.

And we do mean read them. Most people go through the Programs from cover to cover. And 92% * take them home to read again.

They have every reason to. Our Programs are really magazines as well. They contain many articles by some of the finest writers in the arts.

The program itself is an elaborate guide to what they've come to see.

To place your advertising, simply call Herb Teison (212) 983-8870. And the people in this audience will begin to think of your company as big, successful, prestigous . . .

*Simmons Study of Lincoln Center audience.

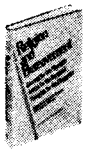
Saturday Review Programs
The world's greatest audience.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Buy
U.S. Savings Bonds

College Prep for 7-12 grade girls
The Colorado Springs School
17 Broadmoor Ave., Colorado Springs, Colorado 80906

COPING WITH *THE* AGELESS PROBLEM



RELIGION AND BEREAVEMENT
by Dr. Austin H. Kutscher and Lillian G. Kutscher

An original anthology of religious and medical approaches, by Catholic, Jewish and Protestant clergymen, as well as doctors and laymen.

1972 Jacketed 350 pp. $12.50*
*$11.25 if prepaid, plus tax and postage

Health Sciences Publishing Corp.
451 Greenwich St., New York 10013

FREE!

Colorful 64-page catalog tells how you can save up to 40% on revolutionary new cassette-books

CASSETTE BOOKS—THE REVOLUTIONARY NEW WAY TO LEARN... Listen and learn anytime, anywhere! Cassette books are handy...fit easily into pocket or purse.

CASSETTE BOOKS COVER ALL SUBJECTS... Psychology. Self-improvement. History. Biography. Philosophy. Poetry. Novels. Children's classics. Great drama performed by great actors and actresses. Entertainment. Sports. Religion. Foreign languages. Bridge. Great authors reading their own works. You'll find exciting cassette books to match *all* your interests.

SAVE UP TO 40% ON THE CASSETTE-BOOKS YOU WANT TO LISTEN TO... We have the largest and most exclusive collection of new cassette-books to be found anywhere. And you can *save up to 40%* ...and often more.

VALUABLE CATALOG—YOURS FREE... Send for your free copy of our colorful new 48-page catalog. It contains complete descriptions of more than 200 available cassette-book titles. *No obligation—mail coupon below now!*

Superscope Library of the Spoken Word

Please rush me your free catalog that lists all your cassette-books, along with information about how I can save up to 40% and more on the cassette-books I want to listen to. I understand I am not obligated in any way.

Name _____
Address _____
City _____ State _____ Zip _____

MAIL TO: Superscope Library of the Spoken Word
Dept. SR-10/28-45
455 Fox Street, San Fernando, Calif. 91340

Travel

A Garlicky Guide to Good Eating

BY RENE LECLER

A famous French restaurateur, Marcel Boulestin, once wrote: "Happiness and peace begin, geographically, where garlic is used in cooking." He was right, I think; yet a good deal of the appeal of southern European cuisine has to do with the atmosphere in which it is served. In northern climes it often falls flat; on its home turf, the shores of the Mediterranean, it is a natural part of the circumambient *joie de vivre.*

Anywhere from Spain to Cyprus the foreigner who follows his nose is led into following up a variety of pungent odors. In Spain it is the aroma of saffron, while in Italy it is the whiff in the air of cheese and tomato—and, of course, garlic. (For the hungry traveler I cannot think of a better introduction than the Italian peasant's *pano al pomidoro*—thick slabs of country bread liberally smeared with tomato and garlic.) In Greece the pungent, pine odor of *retsina* wine inevitably leads to a dinner that gives off the acrid aroma of spit-roasted lamb. As for France. . . .

I once took a walk with a staid Englishman, not noted for his appreciation of food, along the famous Vieux Port area in Marseilles. We were jostled past enormous market stalls and restaurant fronts piled higgledy-piggledy with dozens of varieties of fish. Hefty women in dazzling aprons dangled fresh-caught, outlandish-looking fish in front of our noses and half-pulled us into their establishments until finally we sat down to a plateful of grilled *mostelle* and a bottle of white wine. My friend declared that it was the finest meal he had ever eaten, but I suspect that the sun and the atmosphere provided him with much of his dining pleasure.

While the setting is, in itself, a piquant ingredient of a Mediterranean meal, the menus are often a barrier. One young man I know spent a fortnight's vacation in Provence eating his way through a tedious procession of omelettes—the only word on the menu that he understood. So, to help the traveler order with aplomb, here are translations of the most common southern European dishes.

GREECE

Taramosalata: Hors d'oeuvre made of fish roe.
Moussaka: Layers of minced meat and aubergine. Very good.
Stifado: An excellent beef stew.
Dolmades: Vine leaves stuffed with minced meat. Hot or cold.
Arnaki tis Souvla: The most delicious dish in Greece: a whole roast baby lamb.
Hirino tis Souvlas: Succulent roast suckling pig.
Kotopoulo: Plain roast chicken.
Barbounia: Red mullet, almost always morning-fresh and served after being quickly grilled.

Incidentally, in the usually menuless Greek *taverna,* you are expected to head straight for the kitchen, where you pick your meal on the basis of a sniff and a peer into the various pots.

ITALY

Pasta: Officially, there are thirty-seven different kinds of *pasta.* Actually, there are many more, because each region has its own specialty and really good Italian cooks make their own. *Pasta* may be served plain, shaped—like *spaghetti, tagliatelli, maccheroni, fettucine* —or stuffed—like *canelloni, ravioli, lasagne,* and *gnocchi.* Sauces come in a wide variety. *Alla Bolognese* means with a meat sauce; *alla Napoletana* means with a tomato (*pomidoro*) sauce; and *alla Vongole* means with a shellfish sauce.
Pizza: Forget what you thought you knew about *pizza* when you get to Naples. There are as many succulent varieties as there are good cooks and individual preferences.
Risotto: Apart from the Chinese, no one cooks rice like the Italians, and the North is the real *risotto* country. It can be prepared with meat, shellfish, and even fruit.
Fritto Misto di Mare: A variety of local fish and shellfish, deep-fried.
Abbachio al Forno: A Roman speciality and possibly the best meat dish in the country. It's really roast lamb, but it's carved differently from our version.
Saltimbocca: Another Roman dish consisting of slivers of veal covered with ham and topped off with herbs.
Bistecca Pizzaiola: An oven-cooked steak with a rich tomato-and-garlic sauce.

Rene Lecler is the travel editor of *Harpers & Queen* in London.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Bistecca alla Fiorentino: Charcoal-grilled rib, often with herbs.
Vitello Tonnato: Thin slices of top-grade, cold veal with a tuna fish sauce.

Fish and shellfish are abundant in Italy, and the Adriatic is the original home of *scampi*. Mussels (*cozze*) are excellent, though small. Clams (*vongole*), squid (*calamare*), and anchovies (*alici*) come served up in an infinite variety of ways.

FRANCE

Provencal cuisine, which tends to rely a bit too heavily on olive oil, becomes an art with the subtle use of herbs such as rosemary, fennel, and thyme. Fish is plentiful and much different from the northern, oceanic varieties. *Rascasse*, a spiky, grotesque looking fish, is—despite its appearance—delicious. *Mostelle* is an excellent white fish. *Loup de mer*, the best sea bass in the world, is especially memorable when cooked with fennel over a little blaze of *sarpents de vignes* (the prunings of the vine).

Bouillabaisse: There are almost as many misconceptions about this as there are about *pasta* in Italy. *Bouillabaisse* is not a soup but a thick fish stew, filled with as many as twelve varieties of fish and shellfish. Expensive but worth it.
Ratatouille: An excellent side dish of local vegetables laced with garlic and usually served cold.
Terrine: Properly speaking, an earthenware dish but now applied to almost any *paté* prepared in it.
Quenelles: Sausage-shaped delicacies made of the finely-ground flesh of choice fish such as pike (*brochet*).
Friture: A great local speciality—whitebait, quickly grilled.
Cassoulet: The fame of this dish, which originated in the Toulouse-Carcassone area, has spread all over the world. An ambitious, oven-cooked stew of beans, pork, beef, sausages, duck, and chicken.
Aioli: A special Provencal mayonnaise, with a strong dose of garlic.

SPAIN

Paella: This famed concoction, based on saffron rice with chicken, mussels, shrimp, chick peas, and sometimes ham, is best in the Valencia region.
Chanquetes: An Andalusian fish fry.
Chorizo: A spiced sausage guaranteed to increase wine consumption.
Zarzuela de Mariscos: A copious variety of fish, lightly fried, then boiled in a garlic-and-onion sauce.
Cocido: Sometimes known as *pote gallego* or *alla podrida*, this national dish is a stew of beef, ham, chicken, and sausage.
Gazpacho: But surely you're already familiar with this famed cold soup of Andalusia, based on raw vegetables, tomatoes, onion, and, of course, garlic. □

Now you're talking my language.

KAHLÚA® Black Russian.
What an intriguing idea.

A mood in a glass. So simply achieved. An ounce of Kahlúa, two ounces of vodka, rocks. Perfect before or after dinner...the theatre...or anything at all.
For all manner of intriguingly different Kahlúa ideas, send for our recipe book. Our treat. Because you deserve something nice.

Kahlúa. Coffee Liqueur from Sunny Mexico. 53 Proof.
Jules Berman & Assoc., 116 No. Robertson Blvd., Los Angeles, Calif. 90048

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

505. COLE
Robert Kimball and Brendan Gill
(Counts as two)
Publ. Price, $25.00

591. SOCIALISM
Michael Harrington
Publ. Price, $12.50

518. THE HOUSE OF LIFE:
***Rachel Carson* at Work**
Paul Brooks
Publ. Price, $8.95

355. IBSEN, A Biography
Michael Meyer
Publisher's Price,
Publ. Price, $12.95

143. THE ROCKY COAST
Rachel Carson
Publ. Price, $6.95

346. UPSTATE
Edmund Wilson
Publ. Price, $8.95

003. ELEANOR AND FRANKLIN
Joseph P. Lash
Publ. Price, $12.50

196. CRISIS IN THE CLASSROOM
Charles E. Silberman
Publ. Price, $10.00

573. BIRDS, BEASTS, AND MEN
H. R. Hays
Publ. Price, $8.95

511. POE POE POE POE POE POE POE
Daniel Hoffman
Publ. Price, $7.95

110. THE DECLINE OF THE WASP
Peter Schrag
Publ. Price, $6.95

215. THE 12-YEAR REICH
Richard Grunberger
Publ. Price, $10.00

305. THE MORTGAGED HEART
Carson McCullers
Publ. Price, $7.95

337. I'M OK—YOU'RE OK
Thomas A. Harris, M.D.
Publ. Price, $5.95

328. THE CITIZEN KANE BOOK
Pauline Kael, Herman J. Mankiewicz & Orson Welles
Publ. Price, $15.00

580. BELLA! Ms. Abzug Goes to Washington
Bella S. Abzug
Publ. Price, $7.95

485. FLANNERY O'CONNOR: THE COMPLETE STORIES
Publ. Price, $10.00

498. GROW IT!
Richard W. Langer
Publ. Price, $8.95

102. STORIES AND PROSE POEMS
Alexander Solzhenitsyn
Publ. Price, $7.95

165. MYSTERIES
Knut Hamsun
Publ. Price, $8.95

564. NO NAME IN THE STREET
James Baldwin
Publ. Price, $5.95

577. FRANZ KAFKA: THE COMPLETE STORIES
Publ. Price, $12.50

494. BODY TIME
Gay Gaer Luce
Publ. Price, $6.95

473. TEACHER AND CHILD
Dr. Haim G. Ginott
Publ. Price, $5.95

461. UNCOMMON SENSE
James MacGregor Burns
Publ. Price, $6.95

021. MEMOIRS OF HOPE: RENEWAL AND ENDEAVOR
Charles de Gaulle
Publ. Price $10.00

074. THE DANCE IN AMERICA
Walter Terry
Publ. Price, $8.95

408. WHO OWNS AMERICA
Walter J. Hickel
Publ. Price, $6.95

035. THE MYTH OF THE MACHINE: Technics and Human Development
Lewis Mumford
Publ. Price, $12.00

487. CITIZEN NADER
Charles McCarry
Publ. Price, $7.95

559. THE SAVAGE GOD
A. Alvarez
Publ. Price, $7.95

520. THREE POPES AND THE CARDINAL
Malachi Martin
Publ. Price, $7.95

018. WHO PUSHED HUMPTY DUMPTY?
Donald Barr
Publ. Price, $10.00

006. WHAT I HAVE LEARNED
A Saturday Review Book
Publ. Price, $6.50

566. RUN THROUGH: A MEMOIR
John Houseman
Publ. Price, $9.95

395. ARIEL AND CROSSING THE WATER
Sylvia Plath
(2 Volumes counts as one)
Combined Publ. Price, $10.90

082. DESCHOOLING SOCIETY
Ivan Illich
Publ. Price, $5.95

268. DUCE!
Richard Collier
Publ. Price, $12.50

496. THE CASE OF THE MIDWIFE TOAD
Arthur Koestler
Publ. Price, $5.95

223. MEET ME IN THE GREEN GLEN
Robert Penn Warren
Publ. Price, $7.95

099. THE NEW INDUSTRIAL STATE
John Kenneth Galbraith
Publ. Price, $8.95

049. KNOTS
R. D. Laing
(Deluxe Edition)
Publ. Price $5.95

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Can a book club change your mind?

It *can* if its name is Saturday Review. It can broaden it. Enlighten it. Challenge it. Bring it insights. Fill it with new ideas...get rid of old ones. And, on occasion, "boggle" it.

An idle boast? Not with the kind of books we offer. Our policy is simple, but firm: A book has to really say something, or it's not for us. Just glance at our introductory listing...History-makers. Opinion-molders. Myth-killers. Curiosity-quenchers. Mind-openers. The most important biographies, revealing memoirs, and meaningful fiction being published today. The cream of the literary crop. Significant. Refreshing. Informative. Timely. Fascinating. In short, delicious reading if you've got the appetite.

Our authors will turn you on to what's happening (or not happening!) in our society and environment, in politics, the arts, science, education, communications. They are people who are not only capable of changing your mind, but exciting it with new ideas. Exposing it to new concepts. Absorbing it in new interests.

If you're only slightly impressed...*good.* We identify with people who have high standards and know what they want. Here's what we suggest: try the Saturday Review Book Club. We'll give you any four books listed here for only $1 to start you off (a total value worth up to $52.95).

As a member, you simply agree to take four more books during the coming year—at savings averaging 20% off publisher's prices. And we guarantee you this...should you ever receive a book you don't wish to read and own, you may return it within 10 days for full credit.

The Saturday Review Book Club. It may change your mind. The change will do you good.

Select any 4 books now for just $1.

Saturday Review Book Club
Huntingdon Valley, Pennsylvania 19006

Please accept my application for membership in the Saturday Review Book Club and send me the four books whose numbers I have printed in the boxes below. Bill me only $1 plus shipping and handling for all four.

☐ ☐ ☐ ☐

If I am not delighted with these books, I may return them within 10 days; my membership will be canceled and I will owe nothing.

If I keep them, about every four weeks I will receive the Club's free newsletter describing the forthcoming selection, plus dozens of alternates. If I wish to receive the selection, I need do nothing: It will be shipped to me automatically. If I prefer an alternate, or no book at all, I will notify you by the date specified by returning the convenient form always provided.

I need purchase only four books during the coming year—at savings averaging 20% off publishers' prices. I may cancel my membership any time after these purchases. A modest shipping and handling charge is added to all shipments.

Mr.
Mrs. _____
Miss (please print)

Address _____

City _____ State _____ Zip _____

1 1028S

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Saturday Review Industries

President John J. Veronis
Chairman Nicolas H. Charney

Vice President
Jon M. Stark

Director of Management Services
Herbert L. Williams

CORPORATE STAFF
Josephine Amalbert, Carol Ash, Page Cole, William Fugelsang, Ann M. MacClave

SATURDAY REVIEW PRESS

PUBLISHER
Irving Goodman

EDITORIAL DIRECTOR
Charles Sopkin

SENIOR EDITORS
Thomas Davis III, Paula Diamond, Susan Stanwood, Nancy Uberman
John Knowler, *European Editor*
Judith Sachs, Susan Smith, *Editorial Assistants*
Robert Gales, *Sales Director*
Linda Exman, *Advertising Director*
Jane Pasanen, *Publicity Director*
Judy Goldfield, *Publicity Associate*
Paula Diamond, *Subsidiary Rights Director*
David Ford, *Production Director*
Pat Douglas, *Production Assistant*
Tere Lo Prete, *Art Director*
John Carter, *Copy Chief*
Elaine Chubb, *Copy Editor*
Thomas Casserly, *Business Manager*
Bobby Artis, *Fulfillment Manager*

BOOK CLUB/DIRECT MARKETING DIVISION

PUBLISHER & GENERAL MANAGER
Neil Zelenetz

DIRECTOR
Ralph Cohen

EDITOR
Steven Frimmer
Irma Pascal Heldman, *Associate Editor*
Edward Hughes, *Fulfillment Manager*
Phyllis Salzman, *Administrative Manager*

Saturday Review

PROGRAMS
William D. Patterson, *Publishing Director*
Thayer Bigelow, *General Manager*
Herbert J. Teison, *Associate Publisher*
Irving Kolodin, *Editorial Director*
Robert Jacobson, *Managing Editor*
Suzanne Oppenheimer, *Production Director*
Joseph Gasparino, *Production Manager*
Roanne Alpert, *Dailies Editor*

Programs Staff
Katina Athanasopoulos, Sandra Bersch, Carol Corcoran, Dolores Koch, Shirley Rosenberg, Judith Sterling, Lee Warner

Sales Staff
Hector Cascante, Isabel Cunningham, George Ferron, Maggie Freeman, Paul Kwartin, Robert Marks, Henry Ohrtman

Letters

Past With a Future

I was glad to see your article on the theft of antiquities, "Ripping Off the Past" by Stephen Williams of Harvard [*SR*, October], who says, the hope of a cure lies mainly in education. My only objection is that it gives the impression that only four U.S. institutions have adopted policies prohibiting the acquisition of pilfered artifacts.

In the fervor of their new-found righteousness, these institutions forget that several museums have been following this policy for a long time. Tulane University has not purchased a pre-Columbian relic in more than thirty years, although New Orleans is on the path of many smugglers of antiquities from Latin America. We are offered specimens almost weekly, year in and year out. We also refuse to authenticate or appraise artifacts brought to us by dealers and collectors, a very remunerating form of moonlighting practiced by many museum officials.

Tulane has been carrying on archeological excavations and other research in Mexico and Guatemala during these thirty years, and we wanted to be able to assure these countries that we were observing not only the letter but the spirit of their antiquities laws.

Robert Wauchope
Director, Middle American Research Institute
Tulane University
New Orleans, La.

The Department of State welcomes Stephen Williams's forceful article calling attention to the tragic despoliation of archeological sites and monuments in many countries around the world. We also appreciate the editors' support for the UNESCO Convention as "a start in the right direction." However, Article 9 of the convention should not be overlooked. It requires all countries to respond to the appeal of any other country "whose cultural patrimony is in jeopardy from pillage of archeological or ethnological materials" by participating "in a concerted international effort to determine and to carry out the necessary concrete measures, including the control of exports and imports and international commerce in the specific materials concerned." In the long run this may be the most important feature of the convention.

The executive branch is currently preparing draft legislation for presentation to Congress that would authorize the application of those controls to the materials specified in the international agreements to be negotiated under Article 9. The success of the UNESCO Convention depends on the support it receives in the international community, but we are hopeful that the convention will prove to be of significant effect.

Mark B. Feldman
Assistant Legal Adviser for Inter-American Affairs
Department of State
Washington, D.C.

Olympic Horror

Herbert Gold's moving thoughts on the death of the eleven Israeli athletes ("Watching Munich," *SR*, Sept. 30) expressed what I have been agonizing over since the horrible events occurred. In a very real sense Mr. Gold has helped me through a difficult time.

I thank you for giving me the opportunity to share his grief. He has made my own much easier to bear.

Deborah Snipes
Studio City, Calif.

The senseless killings at Munich seem to me to be one more concrete example of the fact that violence only begets violence. What happened in the Olympic Village was terrible, but the actions of the Munich police at the airport were horrendous.

Leonard Hizer
Atlanta, Ga.

The Ultimate Keyboard

I was pleased to read Charles Lekberg's discussion of my brain child. "The Tyranny of Qwerty" [*SR*, Sept. 30]. That a writer whom I have never met will prepare a comprehensive article about the Dvorak keyboard indicates that a good idea refuses to die.

More people earn their living with the typewriter than with any other business machine. What would be the value of a 50 per cent increase in stenographic production to business and government? For two million workers earning $5,000 a year, it would be $5 billion annually! The cost of teaching typewriting—about $300 per student per year—for approximately one million students could be halved. The increased cost to typewriter manufacturers for assembling type in the Simplified Keyboard arrangement should be nil.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There is little for me to gain from my development. All my patents and original copyrights have expired.

August Dvorak
Seattle, Wash.

August Dvorak, as the article stated, is the inventor of the DSK *keyboard system. Mr. Dvorak's patent expired in 1962, and the remaining copies of "Typewriting Behavior," which presented the basic* DSK *method, were sold to Motivational Communications Corporation Ltd., P.O. Box 544, Mississauga, Ontario, Canada.—Ed.*

Lekberg's article provides a thorough and compelling history of the development of the Dvorak Simplified Keyboard. It is precisely this sort of well-researched, consumer-oriented journalism that is needed to make the public aware of the DSK and similarly suppressed inventions. Ralph Nader's Conference on Inventors and Non-Technical Barriers to Innovation, held in Washington in the summer of 1971, dealt with several such important technological advances that have been relegated to obscurity by vested interests and callous disregard for inventors' rights.

Bernard P. O'Meara
Washington, D.C.

The DSK typewriter may have many virtues, but giving 56 per cent of the work to the right hand is not one of them. This is obviously part of the insidious dextral supremacist conspiracy to make life miserable for the oppressed left-handed minority, who already have to put up with right-handed telephones, shirts, ladles, and other objects too numerous to mention. Up against the wall, right-handed chauvinist pigs! Power to the Southpaws!

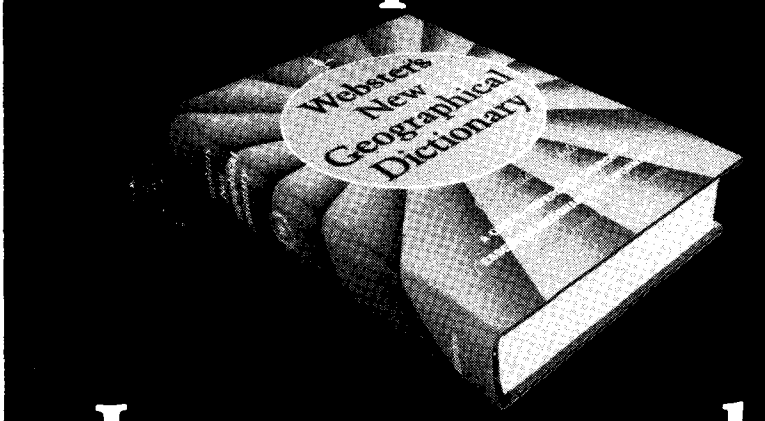
Gerald B. Folland
New York, N.Y.

The Root of the Blues?

Now that a learned psychiatrist and a learned psychologist have come up with a hitherto undiscovered paper by Freud—"The Anatomy of Melancholy" by David Elkind and J. Herbert Hamsher [*SR*, Sept. 30]—dedicated, no doubt, to those of us who have trouble getting up in the morning, perhaps one of the Master's disciples could prepare a companion piece dedicated to my students who have just requested that the college library be kept open until midnight instead of 11 p.m. Suggested title: "Evening Euphoria."

Mary Frances Thelen
Professor of Religion
Randolph-Macon Women's College
Lynchburg, Va.

The new planet Earth.



In so many words.

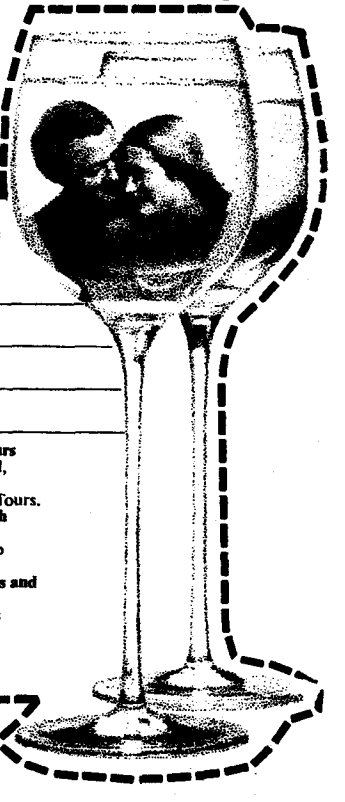
Brand new. From Merriam-Webster. All the countries, regions, cities and natural features of the world in a single alphabetical listing that runs for 1,408 pages and contains over 47,600 entries and 217 maps. It's the most complete, up-to-date and accurate book of its kind, with over 15,000 cross-references, 1970 census figures, and 450 geographical terms translated from other languages. Whatever you're using now is out of date. *Webster's New Geographical Dictionary* is here. Look for it wherever fine reference works are sold. It can put a whole new world at your fingertips for only $14.95.

Merriam-Webster Dictionaries, Springfield, Mass. 01101

Perfect for Rome-antics.

Frolic in the Forum with someone you love. Sip an aperitivo on the Via Veneto. Throw coins in the fountains. Then scamper off to Florence, Venice, Milan and Sorrento. You're carefree because our prices cover air fare, hotels, sightseeing and most meals. For more details, mail the coupon.

Rome.
Part of Alitalia's Romantic Italy tour. Two weeks from $559 to $639. From New York.



For free brochures mail coupon to Alitalia Tours, 666 Fifth Avenue, New York, N.Y. 10019, or call toll-free from anywhere in continental United States—800-621-1972. In New Jersey call 800-962-2803.

Name _____

Address _____

City _____ *State* _____ *Zip* _____

My Travel Agent is _____

- ☐ Extra-Value Vacations to Europe & North Africa 32-page booklet detailing Tour Programs to Italy, Switzerland, Greece, Turkey, Sicily, Tunisia, Austria. 2 & 3 Week Tours.
- ☐ 1 Week "Mini tours" to Italy, Monte Carlo, Greece and Portugal
- ☐ 1 & 2 Week Ski Tours
- ☐ On the Town Tours Italy, Switzerland, Monaco, Turkey, Greece. 2 Week Tours.
- ☐ East Africa, South Africa, Ethiopia 2 & 3 Week Photo Safaris.
- ☐ Fly & Drive Tours and Car Rental Plans
- ☐ Youth Fare Tours

SR-IT-10-28

Alitalia
ITALY'S WORLD AIRLINE

Prices based on 14/21 day round-trip jet economy group inclusive tour fare from New York for groups of 15 or more traveling together. Prices of land arrangements are per person double occupancy. Bookings must be made 30 days in advance.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Editorial

The Virtues of the Filibuster

Earlier this month a minifilibuster was staged in the United States Senate to prevent passage of an antibusing bill. The following guest editorial was written by one of those who helped talk the measure to death, Democrat Alan Cranston of California.

Three years ago I joined with a group of predominantly non-Southern, nonconservative, nonhawkish senators and voted for passage of a new rule that would make it easier for the Senate to bring a halt to a filibuster. We lost. Today, looking back at that reversal, I'm glad we lost. In the intervening years I have gained a deeper understanding of the value of unlimited debate under contemporary circumstances. The filibuster, that liberally maligned permissive quirk that allows a speaker (or, more usually, a small group of speakers) to control the Senate floor as long as he continues speaking and as long as he is not halted by cloture, can serve useful purposes.

A number of events have caused me to change my original and perhaps traditionally liberal stand on filibustering. One event in particular stands out. I had been involved in a continuous debate that could have delayed extension of the draft act, at least until the administration accepted the Mansfield Amendment, when the Senate voted for cloture (a vote to end the filibuster by two-thirds of the senators present) by a single vote. Among those voting for cloture were senators who strongly opposed the draft and others who strongly supported the Mansfield Amendment to end our military involvement in Vietnam. They opted to shut off debate and to force a vote that they knew would continue the draft and kill the Mansfield Amendment, simply because they didn't like filibusters.

When our dislike for filibusters becomes more important to us than our distrust of the draft or our revulsion against the U.S. involvement in Vietnam, then I think it is time for us to take another look at the filibuster.

Members of Congress should use all legitimate means at their disposal to attain legitimate, desirable ends. The filibuster is a legitimate Senate mechanism. I have used it when I felt it would serve a good purpose—as when trying to end the draft. By the same token, when the filibuster is used against ends that I favor, I will support cloture—that other legitimate and historic Senate mechanism—to put a time limit on debate. In either case it will be the ends—the issues—that will determine what I do, not my biases for or against the filibuster.

A year ago there were thirteen senators who had never voted to stop a filibuster. Today there are none. I hope that from now on *all* senators will vote only according to their convictions and not according to procedural concepts that were formed when the filibuster was used primarily to stop civil rights legislation.

As far back as 1841 Senate liberals filibustered against a national bank, which they considered would be a boon for the wealthy. Since then the filibuster has often been used by progressive senators against restrictive or special-interest legislation: suspension of the writ of habeas corpus in 1863; a move to repeal laws enfranchising ex-slaves in 1879; ship subsidy bills in 1907 and 1925; an oil-leasing bill in 1919.

The filibuster fell into disrepute during the next three decades because it was used so frequently against civil rights legislation. But once again times have changed. In this session of Congress the filibuster was used to stop an antibusing bill favored by the same senators who used the filibuster for many years to stymie civil rights legislation.

The last several decades have seen a revolutionary and menacing increase in executive power in nations throughout the world. In an age of computers, wiretaps, and nuclear missiles, power concentrated in a single man, or in a single branch of government, is potentially inimical to freedom—especially when that man possesses the power and prestige of commander-in-chief.

Congress has become the weakest branch of our federal government, deferring time after time to the executive.

Congress has the power, however, to slow, and perhaps block altogether, precipitous, unwise, or unconstitutional action by an all-powerful President. It also can arouse the American people to the danger—perhaps the surest deterrent to tyranny that Congress has.

Through unlimited debate the Senate can delay government action where delay is the better part of wisdom. The people want, and should have, an activist government. But, all too clearly, not everything the federal government does is wise, nor is it always done well or at the best time. Our times demand that government act decisively, but not hastily; forcibly, but not imprudently.

Government delay can be healthy. So can government inaction. There are things that the federal government has done that it should never have done at all, and many of us are still suffering as a result. The best thing one can do about a proposed bad law is not to pass it in the first place. The next best thing is to keep it from coming to a vote.

Delay and inaction need not be signs that the system is failing. Unlimited Senate debate can be a tool for moderation; it can force compromise in instances where one side or another is so powerful that it doesn't make reasonable compromises. Unlimited debate can also give people time to express their will. Because representation is determined in the Senate by state rather than by population, the view held by a Senate majority may not represent the view held by the majority of the people.

But the overriding value of unlimited debate is the protection it affords minority rights. Democracy to me, and to most Americans, means not only majority rule with constitutional limits on governmental powers but also protection of minority and individual rights.

None of this, however, is to be taken to mean that I oppose any limit whatever on debate. Some issues involving basic democratic principles should be filibustered forever if that proves to be the only way to prevent an unconstitutional invasion of our liberties. But such knock-down fights occur rarely.

For the present the filibuster should be used judiciously—as a privilege as well as as an obligation. Should the time come when there is a better balance of powers between the executive and legislative branches, it might be wise to make it easier to halt a filibuster. Say, by a three-fifths vote (the rule I had urged and been defeated on three years ago). But that time is not now.

Alan Cranston

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Saturday Review of
SCIENCE

THE GLOBAL TELEPHONE NETWORK

BY BRENDA MADDOX

Telephones, invented nearly 100 years ago, are the basic instruments of the new communications technology. They already can be used for spur-of-the-moment intercontinental conversations, and their reach will gradually be extended to include most countries of the world. Within the next decade, moreover, telephones will begin to perform any number of new services, such as taking messages or ordering theater tickets. Eventually they will become the means by which homes and small offices will have access to computers. While many of the functions of the telephone may, in the long run, be taken over by the television set, telephones will be ready to move into the territory now occupied very inadequately by radio—that of providing mobile, open-air communications. The telephone's future can hardly stop short of the two-way, wrist-watch picture telephone made famous by Dick Tracy. Furthermore, it will allow anyone to talk to anyone anywhere or to dip into many of the world's repositories of stored information.

That the potential of the telephone has been so little publicized is not surprising, for even in their present form telephones are an underused and unappreciated form of communications technology. There are now well over a quarter-billion telephones in the world; yet, even in the United States and Canada, the two countries that are far and away the most addicted to telephoning, the national average number of conversations is less than two per person per day. Even in countries well supplied with telephones there are large groups of the population who could well use the instantaneous two-way exchange of human voices that telephones provide but who are largely deprived of it. They include those who are poor, very young, and/or traveling. Moreover, the extent to which rather sophisticated people remain telephone-shy is remarkable. There are quite a lot of tourists who have flown to the far corners of the earth that would not dream of making an international telephone call. Such inhibitions make poor use of the world's telephone networks, which are (although few notice) technical miracles. The networks can in a matter of seconds make millions out of billions of possible connections among telephones thousands of miles apart. And they can just as swiftly unmake them and establish millions of new paths in quite different directions.

Brenda Maddox is an American journalist living in London who has written extensively for The Economist. *This article is adapted from her book* Beyond Babel, *published by Simon & Schuster, Inc.*

© 1972 by Brenda Maddox. Reprinted by permission of Simon & Schuster, Inc.

The "girlless, cussless" technology of the telephone is making it increasingly easier to speak to anyone anywhere instantly.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

In a room lined with pyramids of foam plastic to absorb radio energy, Bell Labs engineer Charles A. Haas inspects a model of the Telstar experimental communications satellite.

On a Monday morning in winter in the eastern United States there may be thirty million persons using the telephone network at any one moment.

Telephones are important to the future of communications not only because of their potential but also because they already provide the bulk of the world's communications business, and the world's communications networks are planned on the basis of telephony. Telegraph and telex traffic travels over circuits that are derived from telephone circuits; one telephone circuit can yield as many as twenty-four telegraph or telex connections. It is the telephone authorities more than any others who have the power to decide whether things like the electronic delivery of printed material or automobile radio telephones are going to pass into the hands of the public. And, when they make decisions affecting the future, their primary concern is to preserve the integrity and smooth working (such as it may be) of their existing telephone system.

Right now these authorities, whether privately owned, such as AT&T in the United States, or publicly owned, such as the British Post Office, are under enormous strain. The number of telephones and the size of the network under their command are doubling every ten years—or faster. The demand for the interconnection of computers by telephone lines is growing even faster—from 30 to 150 per cent a year. The men in charge must decide how to expand the present service while they introduce the new technology and new services. They must both stand still and move forward. Failing to do either would enrage the public. In the United Kingdom and the United States there is unprecedented criticism about the way in which the telephone systems (and, to some extent, the computer connections) are performing. The ultimate threat is very real. AT&T and even the British Post Office might lose their historic monopolies.

The search for better telephone service is virtually universal. What makes it difficult is that telephone equipment —the subscriber's apparatus, the central exchange machinery, and the transmission lines—is expensive and not quickly produced. Only a few affluent countries (chiefly the United States, Great Britain, Canada, Sweden, Japan, and West Germany) have communications-manufacturing industries of a size that can serve the home market and export great quantities as well. Much of the world is dependent either on exports from these countries or on licenses from them to manufacture their equipment domestically. The competition among these suppliers, which also include the New York-based international conglomerate International Telephone and Telegraph Corporation (ITT), is fierce. For, once telephone authorities in a country have committed themselves to a certain supplier, they must buy equipment in great quantities and they cannot change brands in a hurry.

One of the reasons why much of the world's telephone service is so poor is that there are too many varieties of equipment working together. Insufficient standardization is largely responsible for making the French telephone system so unreliable, and the same cause leads to the legendary troubles of nations such as Brazil. (In Brazil the service is so bad that boys are hired to sit holding clusters of receivers to their ears, ready to signal if there is a dial tone.)

The picture is brightening, however. AT&T reported in its 1970 volume, *The World's Telephones* (one of the world's most readable collections of statistics), that the total number of telephones rose from 134.6 million in 1960 to 255.2 million in 1970. The greatest increase over the decade occurred in Asia —from nine million to thirty-one million telephones, principally because Japan increased its telephones nearly fourfold during that time. But Western Europe, too, showed impressive growth, greater than that of North America, which began the decade (and the century, for that matter) better supplied with telephones. In Europe Spain went from 1.6 million telephones in 1960 to four million in 1970; Greece, from 190,000 to 881,000. Almost all the other European countries, including Poland, Czechoslovakia, and Yugoslavia, doubled their numbers of telephones.

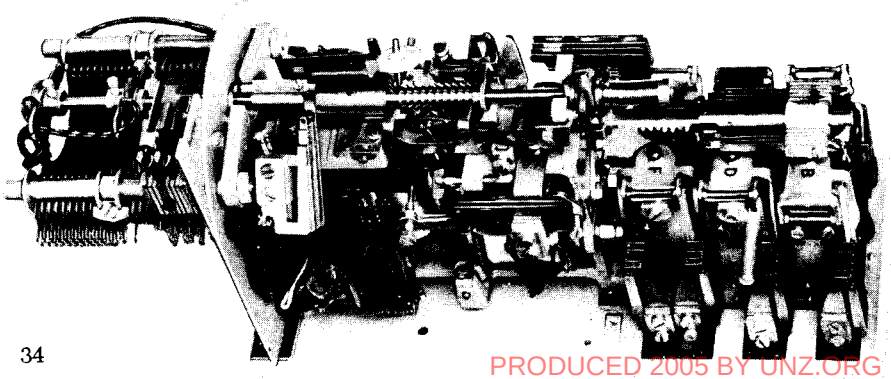
With so much new equipment being put into service every year, the world's telephone facilities rapidly are becoming entirely automatic. Less developed countries can join telephony technology at the eleventh hour; they can begin with automatic, flexible telephone systems, while countries with older telephone systems must gradually phase out the old-fashioned switchboards and retire their manual telephone operators. Already nearly 95 per cent of the world's telephones are able to obtain a dial tone without the aid of an operator. Someday international dialing will be equally as automatic.

International self-service by telephone customers is well under way. Since 1952 it has been possible between the United States and Canada. In the 1960s subscribers in various Western European countries began to dial across their borders; in 1970 the first automatic transatlantic dialing began. Before all the world's telephones can be interconnected, however, certain difficulties must be overcome. The greatest of these is dissimilarity of telephone numbering arrangements from nation to nation.

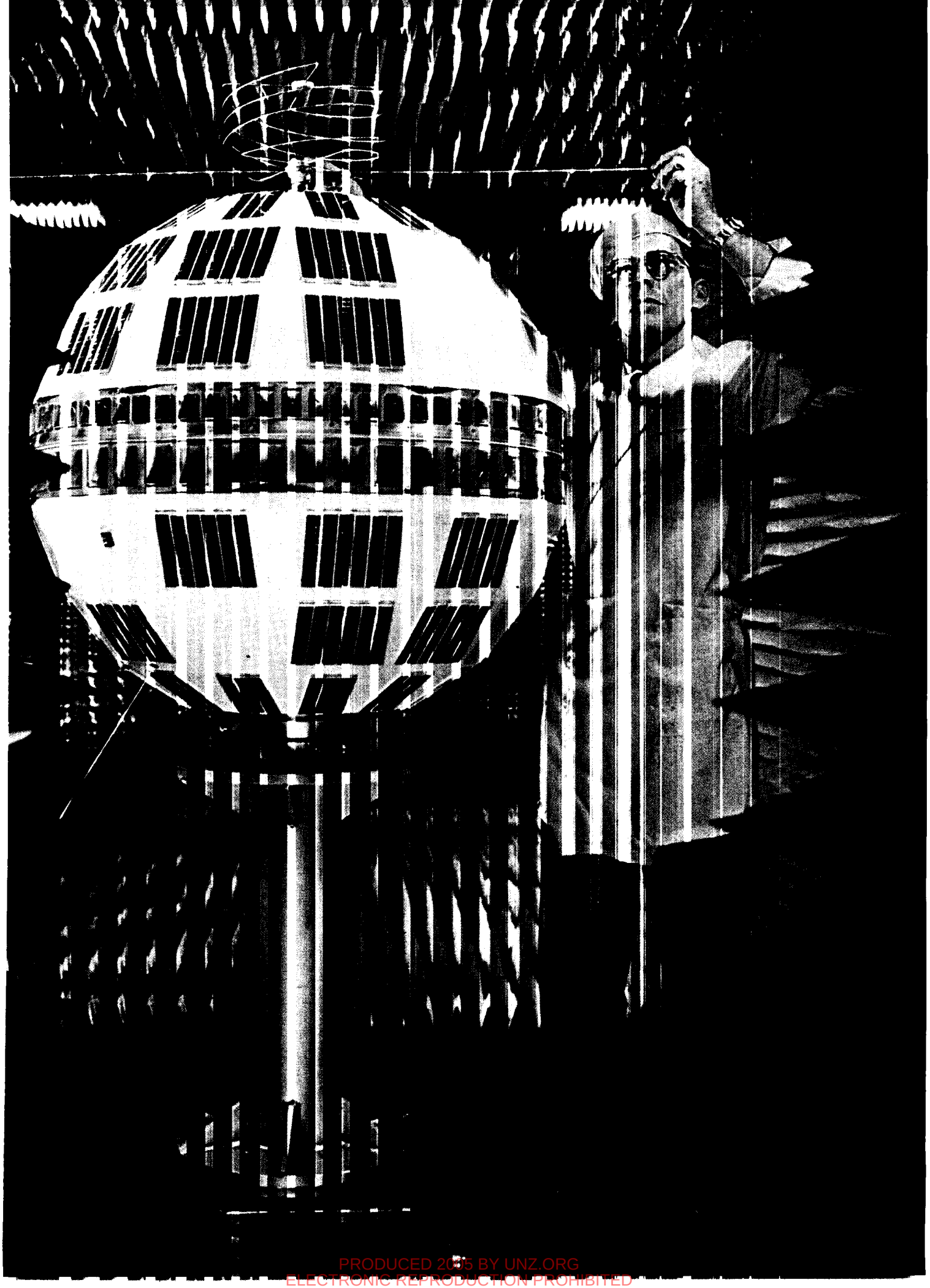
The International Telecommunications Union (ITU), the agency of the United Nations that looks after communications arrangements among nations, has been hard at work since 1961 to formulate plans for worldwide automatic telephony. ITU has determined the routes along which traffic will flow and has examined the technical and financial problems involved. Its most important contribution has been the preparation of a worldwide telephone numbering plan that will accommodate all the world's telephones until the year 2000.

A world telephone number will have somewhere between thirteen and nineteen digits. Anyone who wishes to make an intercontinental telephone call will first dial two or three digits to be con-

The device below is a Strowger switch, a version of the first automatic switch, invented in 1889 in Kansas City by Almon B. Strowger.



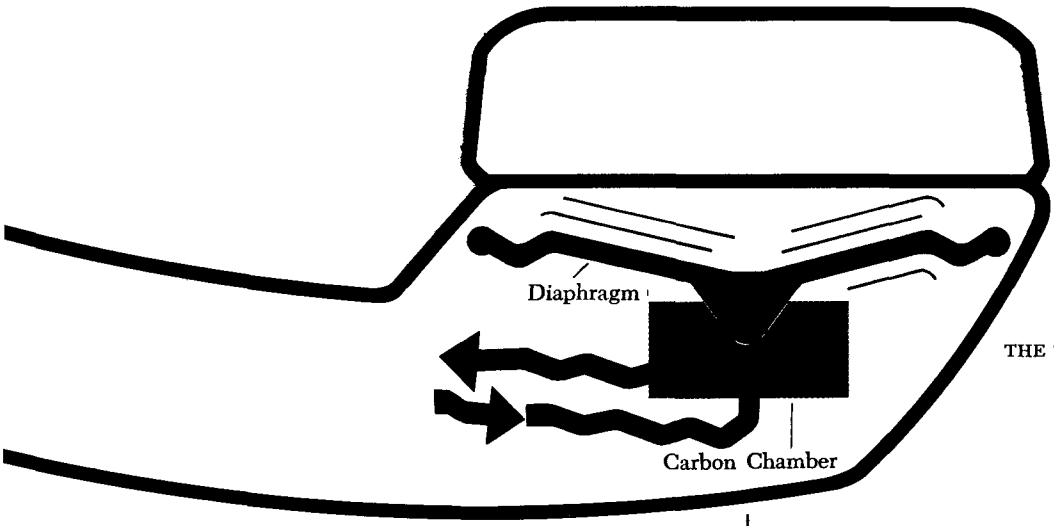
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The transmitter of a telephone is a transducer. Its function is to convert sound into electricity. When you speak into a telephone, the sound waves strike a circular piece of thin aluminum, called the diaphragm, causing it to vibrate. The center of the diaphragm has a small gold-plated dome that projects into a container filled with tiny grains of carbon—the carbon chamber.

The carbon chamber is part of the circuit through which electricity flows in the telephone. When the dome of the diaphragm vibrates in the carbon chamber, the grains of carbon become compressed or rarefied and the amount of electricity flowing through the chamber fluctuates. This fluctuation forms an electrical wave pattern that is then transmitted over the telephone line.



THE TRANSMITTER

nected to his own country's international telephone exchange. Then he will dial one, two, or three digits to be connected to the particular country he wants. The remaining eight to ten digits will take him to the trunk number within the country and then to the particular number that is desired.

As a part of this plan, the world has been divided into nine large geographical zones, each with its own telephone number. These are:

1—United States and Canada
2—Africa
3—Part of Europe
4—Part of Europe
5—South America, Central America, Mexico, and the Caribbean
6—South Pacific and Oceania
7—Soviet Union
8—Far East
9—Middle East and Central and Southeast Asia

The relationship between poor communications and political isolation has not been sufficiently appreciated. Portugal and South Africa had inadequate radio links to the rest of the world until new submarine cables were laid, giving them telephone circuits of good quality twenty-four hours a day. One of the first signs of the willingness of the People's Republic of China to revive its contacts with the West was the reopening in 1971 of the international telephone service suspended in 1948. The quantity and quality of telephone connections between Eastern and Western Europe is increasing; automatic dialing across borders will inevitably follow. (Think what direct dialing into and out of Czechoslovakia would have meant in the spring of 1968!) It may be that international telephoning will be more effective than satellite broadcasting in creating a sense of world community.

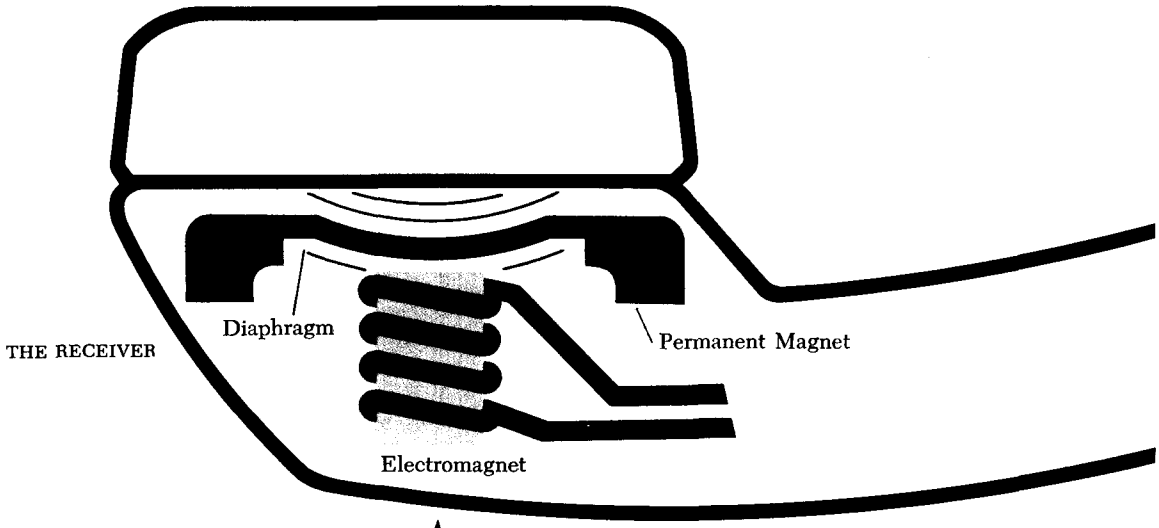
In practice it will always be possible for any country to sever its telephone connections with the outside world, no matter how much automatic international dialing should develop, for all international calls have to flow through certain national points, called gateway exchanges. But to block the lines would be a serious disruption of the international telephone traffic patterns that will, on an increasingly automatic basis, flow through one country or another according to the ITU's plans for routing traffic under varying conditions. Therefore, the more international traffic there is, the more reluctant a government would probably be to put roadblocks in its way, and the greater the freedom its citizens must be considered to have gained when it arranges to allow automatic, international dialing.

Even if telephones were to be used only for talking, their future growth

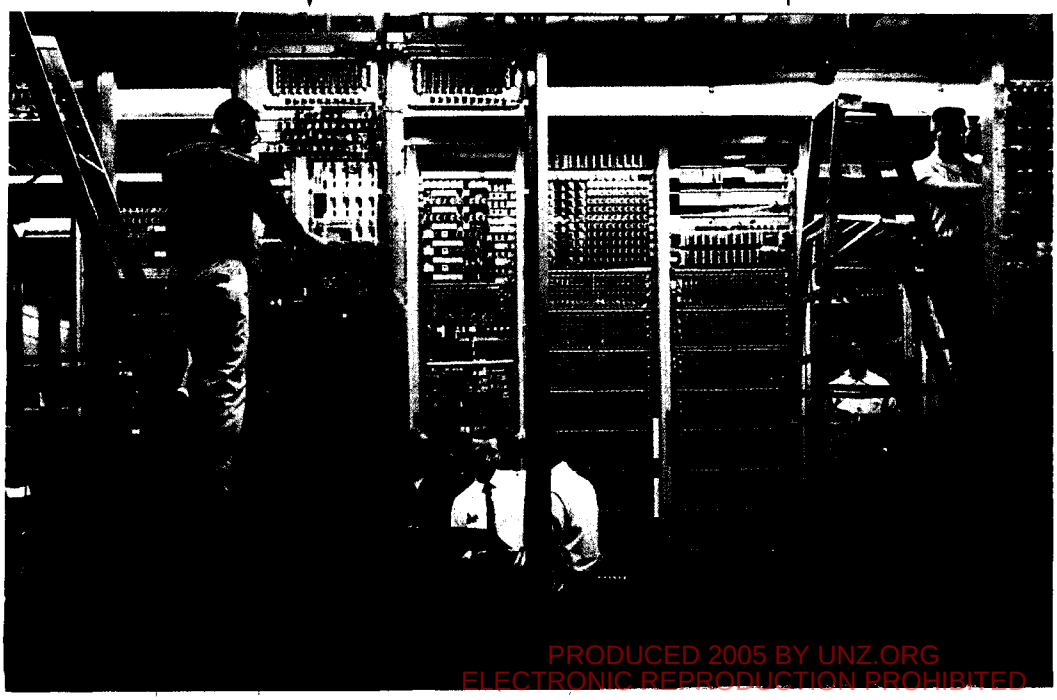
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

The telephone receiver, like the transmitter, is a transducer. It converts electrical patterns into sound waves. The receiver consists of a diaphragm much like the diaphragm of the transmitter, an electromagnet (a ring of soft metal with a coil of wire wound around it), and a permanent magnet (a cup-shaped magnet that surrounds the diaphragm and keeps it taut).

When the varying electrical current from the transmitter of the calling telephone flows into the electromagnet, the magnetic forces in the receiver are alternately increased and decreased. This fluctuation causes the diaphragm to vibrate, producing sound waves in a pattern similar to the electrical pattern. These waves are the "voice" you hear over the telephone.



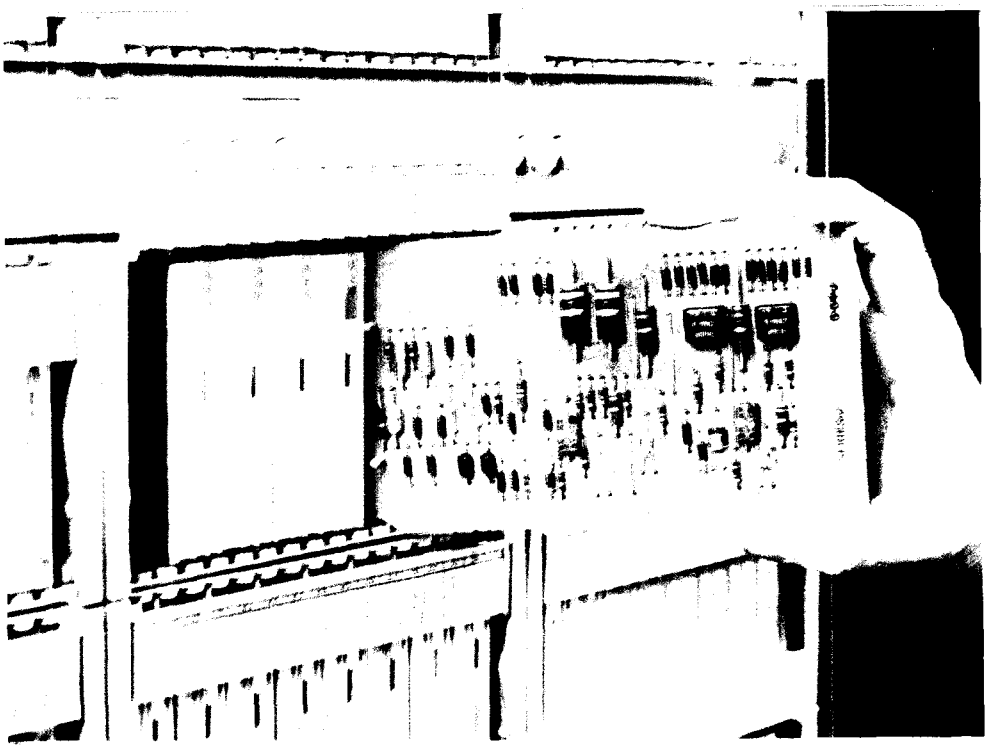
THE RECEIVER



The heart of a telephone exchange is the switching system, which allows you to contact the party whose number you dial. In the United States the majority of telephone exchanges employ what are called crossbar switches left , first used in 1938.

The crossbar switch is essentially a rectangular device with horizontal and vertical bars crossing each other in a latticework. The bars are mounted on a frame so that they can pivot or tilt. Sets of electrical contacts are mounted on the bars, and, to complete a connection, first a horizontal bar moves, and then a vertical bar, causing a particular set of contacts to close. As many as ten simultaneous connections can exist through a single crossbar switch, whereas earlier switches could handle only one connection at a time.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



The panel of transistors and diodes at left is called a circuit pack, the heart of the newest telephone switching system, the Electronic Switching System (ESS).

seems to be irrepressibly assured. Millions of people still are waiting to obtain their first telephone; everybody who has one will tend to talk more often for longer periods over greater distances. The only natural limit to the use of the telephone may be the human inclination to sleep seven or eight hours a day. When it is 8 a.m. throughout most of the Continent, it is five o'clock in the evening in Sydney, Australia. All telephone traffic between Europe and Australia seems destined to be crowded into the few hours of the day that are convenient on both ends of the line.

But telephones are going to change their function. More and more they will transmit electronic information to computers as they now bring voices to human ears. To do this, they must have push buttons, not rotary dials, and, if they are to display pictures and print, they must have small screens. Of the two, the push buttons are perhaps the more important.

Push-button telephones are already in widespread use in North American and Swedish public telephone systems and in a great many other places in the kind of private, automatic telephone systems that large companies use. That they are superior to a rotary-dial telephone is obvious to anyone who has tried both. Pushing a dial round and round suddenly seems exhausting, and the wait for the dial to return to position likewise seems a waste of time. Push buttons can feed a telephone number into a telephone exchange much more quickly than a rotary dial can; besides, push buttons enable a caller to make his connection before he forgets the number, with far fewer errors.

The order and the arrangement of the buttons exercised the imaginations of ITU's telephone committee (the CCITT) considerably. Some committee members argued that the numbers should rise from bottom to top, as they do on most adding machines, so that office workers could manipulate the telephone buttons with the same fingering they learned in order to operate calculating machines. But the view that finally prevailed put the buttons in reading order. There are four rows of three buttons each, with the numbers proceeding horizontally from left to right. The bottom row has a zero in the center, and the question of what to do with the two extras—called utility buttons—remains to be decided. They most probably will be used to convey the end of one series of digits or a change from one set of figures to another, or perhaps they will be made a currency symbol.

The effect of these changes will be to turn the telephone into a numerical typewriter, a typewriter connected to a telephone line. Not only will the buttons feed telephone numbers but also other kinds of numerical codes through the telephone exchange and beyond to computers at banks, shops, or booking offices. Then it will be a swift matter to use the telephone for banking, shopping, or making reservations of whatever kind.

In the near future the kind of telephone services that children imagine are possible will at last be available. There will be three-way telephone conversations. If a call is made and the line is busy, the telephone will automatically try the number again. Only very short telephone numbers will be needed for places frequently called—to ring home from the office will require one or two numbers, not seven. One will be able, while talking on the phone, to receive a signal that another call is waiting, interrupt the conversation, answer the second call (without changing to another receiver), and then resume the original conversation. It will also be possible to arrange for the automatic transfer of calls to another number simply by dialing the right codes into the telephone exchange. A doctor going over to a neighbor's house for a drink will not bother to alert his answering service. The exchange will become, in fact, everybody's answering service.

The office switchboard operator, one of the major obstacles in the flow of the world's communications, will disappear (or at least do double duty as a receptionist and flower arranger) as internal switchboards become automatic and calls from the public telephone network find their way automatically to the desk of the person for whom they are intended. Dialing directly, without the assistance of an operator, would be too prosaic a convenience to be mentioned here, were it not that too many offices, those in Great Britain in particular, do not enjoy very much of it yet. Anyone who thinks that technology is moving too fast should contemplate the lack of these services that were technically possible years ago.

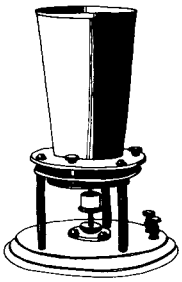
If any single piece of the new communications technology has been advertised in advance, it is the picture telephone. Yet there is little sign of any demand for it at all. Telephone manufacturers trot out a picture telephone whenever a world-of-tomorrow exhibit is called for, and in the United States AT&T not only has put them into service but expects by 1980 to have installed one million. Perhaps the demand will materialize, but the picture telephone's future is bound to that of cable television and broadband communications. If one should flourish, the other may not.

An AT&T picture telephone was a curiosity at the New York World's Fair in 1964–65. It was the subject of an experiment among branches of the Westinghouse Corporation in the late 1960s, and AT&T led the world in introducing picture telephones into commercial service in 1970. Ten of them were installed in the White House in 1960—none in the President's office, however.

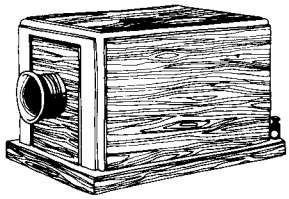
The disadvantages of picture telephones are formidable. Picture calls consume as much band width as several hundred normal telephone calls, a fact that must be reflected in the price of the service for a long time to come. At its outset picture telephone service costs

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

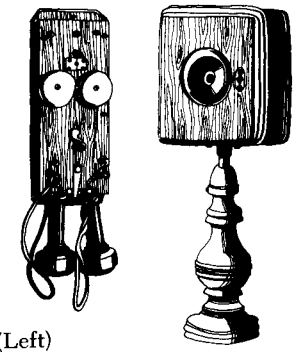
A CENTURY OF TELEPHONES



1876, The Liquid Telephone. This is the unit used by Alexander Graham Bell when he spoke his historic words, "Mr. Watson, come here; I want you!" The receiver for this telephone was a tuned reed.



1877, The First Commercial Telephone. The round opening in this set served as both receiver and transmitter. The set was first used by a Boston banker who attached it to a line between his office and his home in Somerville, Massachusetts.

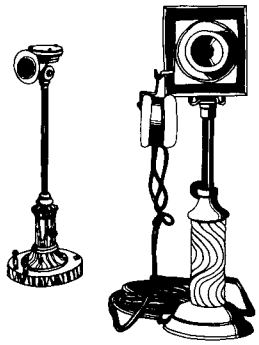


(Left)

1878, The Wall Set. In earlier telephones people used the same device for talking and listening. The Wall Set of 1878 was the first telephone with two devices, one for the mouth, the other for the ear. However, you could use either for talking or listening.

(Right)

1880, The Blake Transmitter. Invented in 1878 by Francis Blake, Jr., this transmitter was the first to utilize carbon and offered increased voice clarity.

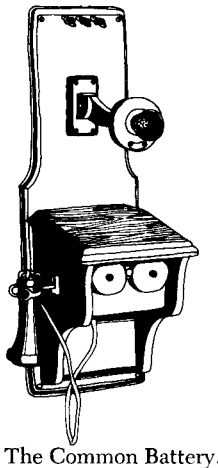


(Left)

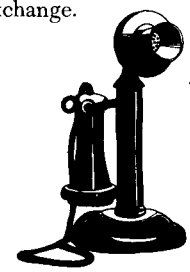
1886, The Long Distance Transmitter. Bell himself used this model that employed a platinum diaphragm for improved long-distance transmission.

(Right)

1892, The Desk Set. This was one of the first efforts to make the telephone decorative as well as functional.

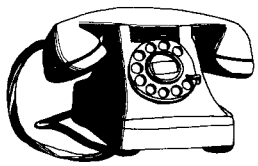


1900, The Common Battery. The first telephones were voice-powered. Then wet batteries were used, often resulting in acid spillage. Dry batteries followed and, in turn, were replaced by the common battery unit that utilized a power supply located at the exchange.



1910, The Desk Set. Made of cast brass, this model—later constructed of steel—was widely used for twenty-five years. Some are still in use.

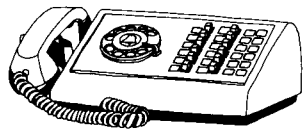
1919, The Dial Telephone. The dial was made possible by the switching system invented by Almon B. Strowger in 1889. However, it was some time before the system was sophisticated enough to permit dialing in large cities. New York City, for example, did not get the dial until 1922.



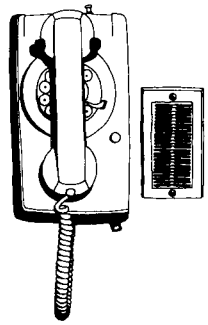
1937, The "300" Type Desk Set. This was the first model to have the bell located in the base of the set. It was the standard telephone throughout World War II.

1949, The "500" Type Desk Set. Offering an adjustable volume control in the base of the set, this model is the most commonly used telephone in the United States today.

1958, The Speakerphone Set. Separate microphone and speaker units free the user's hands in this model. It also can be used as a conventional telephone.

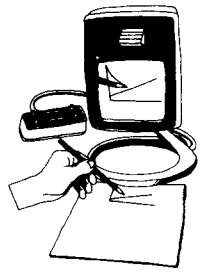


1958, The Call Director Telephone. This model was designed to handle several incoming, outgoing, and inter-office calls at the same time. There are two main types—the eighteen- and thirty-button models.



1960, The Home Interphone System. An outgrowth of the Call Director Telephone, this model allowed communication among various rooms in the home as well as regular telephone service.

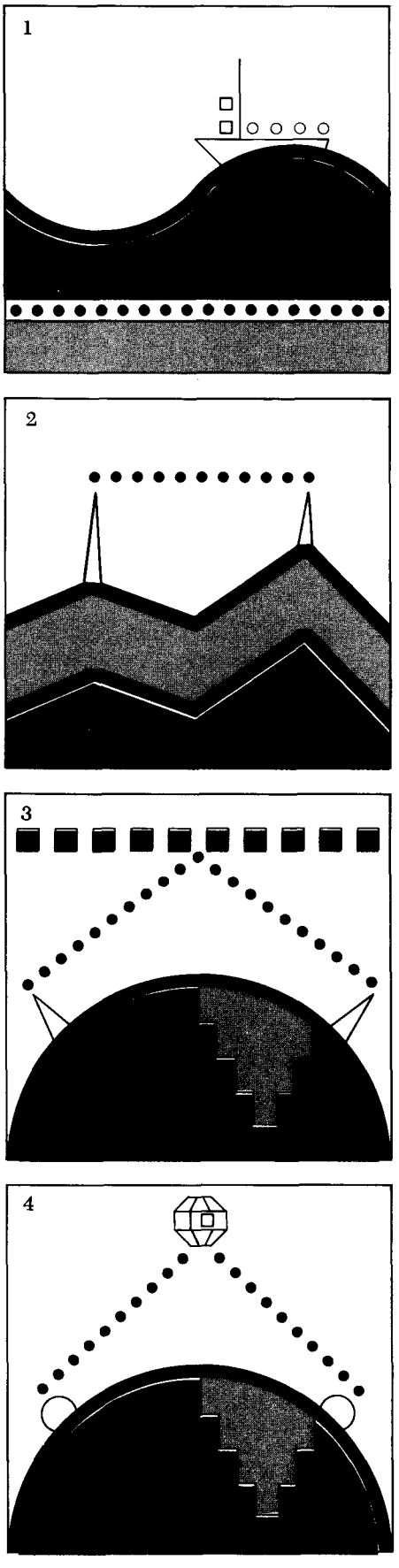
1964, The Touch-Tone Telephone. Here the dial is replaced by push buttons. The system not only allows calls to be placed more quickly and easily but may soon permit communication with computers through numerical codes.



1969, The Picturephone. Although Picturephones will add a new dimension to personal telephone calls, it is suspected that their prime function will be visual data transmission.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Telephone calls once were transmitted only above ground by metal wire. Today calls travel through cables under water (1) and through the air between "line of sight" towers (2). They are also bounced off the ionosphere (3) and are received and rebroadcast by satellites (4).



$100 a month, just for the basic rental of the set. Another disadvantage is the fact that the quality of the transmitted picture is less sharply defined than that of television. The public may be willing to accept this; again, it may not. A third drawback is the fact that the picture telephone is even more inhibiting than an ordinary telephone and may be underused once it is installed.

Picture telephones are unlikely to be used for a very long time for anything but business communication. The price will be a formidable deterrent unless a much simpler system, along the lines of that designed by the Radio Corporation of America, in which pictures can be sent over an ordinary telephone connection as long as the speaker stops talking, should come into use. In any event the picture telephone will probably have to perform some kind of photocopying service, in which a chart or a diagram displayed on the telephone screen can be reproduced on sensitized paper, before it is in any widespread demand.

Conceivably, by the end of the century a call by picture telephone will be no more expensive than an ordinary voice-only call. Price reductions will depend on the introduction of millimeter wave guides carrying a quarter of a million telephone circuits. Reductions also will depend on advances in solid-state technology to make the apparatus (which is really a kind of small television camera) lighter and more able to perform under varying conditions of lighting and distance. Its long-term future, if it is not deprived of one by the emergence of the multipurpose television set, is probably in the graphic display of print-out from computers. One could dial up the inventory of the contents of a warehouse or the flight-arrival news from an airport. Its other uses, however—showing off the baby or showing the doctor what the spots look like, for example—must not be dismissed.

The telephone exchange is the heart of the telephone system. It is the place at which incoming calls are accepted and from which they are sent along their way to their destination. The actual process of accepting and routing is called switching. The process may be repeated many times if a call is traveling a long distance: The call goes, like a car on a journey, from a local road to trunk roads and then finally back to a local road again, stopping at a particular building. If too many calls come into an exchange, they cause congestion and the dialer fails to get a dial tone or gets a busy signal before he has finished dialing. This annoyance is increasingly common as the world telephone networks struggle to cope with rising traffic. Yet telephone exchanges cannot be designed to cope with all conceivable peaks of traffic. That would be as inefficient as to design roads capable of simultaneously carrying all the cars in a country.

The biggest obstacle to better communications in the world is the antiquated telephone-exchange equipment used in about 90 per cent of the world's systems. It is old but still working. Telephone exchanges are the most costly part of a telephone system and the longest lasting. Telephone authorities are reluctant to scrap technically obsolescent equipment while there is still some life in it, and they are also loath to change basic systems too frequently.

If telephony were a new invention, starting out now from scratch, telephone exchanges would be a form of computer. Any computer could get in touch with any other computer in the system simply by reading the code fed in by the telephone number. Instructions about how to deal with carrying patterns of telephone traffic could be contained in the computer's memory. So could all the information on providing special services for customers and even some disservices. Computers could automatically disconnect a telephone if the bill were not paid and automatically reconnect it when the debt is cleared. Telephone exchanges are, even in their old-fashioned form, a mechanism for storing and transferring information. Computers could combine the whole operation in a single box or row of boxes. They will do so eventually; it is only a matter of time.

But it might be a long time. What the world's telephone systems will depend on for the next decade or two is the automatic telephone exchange, a modified version of the one invented in Kansas City in 1889 by an undertaker named Almon B. Strowger. Strowger distrusted the local human telephone operators, suspecting that they were transferring to his rivals telephone calls intended for him. So he invented a device to eliminate the operators; he called it a "girlless, cussless" telephone. (Even so, woman's liberation from the menial, tedious job of telephone operator is not yet complete.)

Strowger's automatic exchange takes the electrical connections to all the telephones served by a particular ex-

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

change and gathers them into banks of 100 or 200. These banks are curved, in ten rows of ten, around the inside of a cylinder. When someone dials a seven-digit telephone number, the first three numbers usually select the particular local exchange that is being called and the next four numbers select the particular block of 100, sending a mechanical arm counting step by step up the cylinder until it finds the right horizontal path and then in along the row until it reaches the contact that is attached to the telephone of a particular subscriber. An electrical contact is made, and then—with any luck—the telephone rings.

The important thing to remember about Strowger switching is that it works step by step. It is slow. There are lots of moving parts that may get dusty; the dust introduces noise; maintenance men must go along and clean them. There is nothing wrong with Strowger switching. It is interesting for schoolchildren to see on visits to the telephone exchange, and it will serve many of the world's telephones for the rest of the century. But the switchings are inefficient, and they do not store information. As the volume and variety of communications traffic rise, Strowger becomes more and more of an economic drain on the system. The faster a telephone exchange can connect two parties, the quicker the billing starts. Furthermore, a faster exchange can handle more calls, and thus the telephone authority can recover more money from its enormous investment in the exchange equipment.

After World War II the search was on for a faster, cleaner form of telephone switching. In the United States and in Sweden, well before the war, a much lighter and more compact switch, called a crossbar, was developed. The contacts are in the open air, but they do not gather as much dust as Strowger switches, and they are capable of much more flexible operation. The failure of Britain to follow America's and Sweden's lead into crossbar switching is the main reason for the sad state of the British telephone system today. In the United States more than 50 per cent of telephone exchanges use crossbar. In Japan and in Sweden the proportion is even higher. In Britain, however, more than 90 per cent of the exchanges still depend on step-by-step switching, with all the concomitant disadvantages.

Since crossbar, exchange technology has been moving slowly toward all-electronic telephone exchanges that perform like computers. One development has been a semielectronic exchange based on a device called a reed relay, in which two hairlike metal reeds are sealed in nitrogen in a glass ampoule. Because the reeds are so tiny, the time required to draw them together and to make the electrical contact is infinitesimal, and the telephone at the receiving end rings as soon as the caller has fed in the last digit. In general, only telephone exchanges built on some form of semielectronic switching can offer the kind of customer services discussed earlier.

Eventually telephone exchanges will become all-electronic—that is, they will work entirely with solid-state devices and not require even the tiny kind of open-and-shut mechanical operation that occurs in relays. Eventually office switchboards, too, will disappear and their functions be taken over by company computers. Before that day computers will come to work more and more as traffic directors for more conventional exchanges, and there is some expectancy that their intelligence may be coupled even to Strowger to force the plodding old machines to do new tricks.

Computers may be the salvation of the telephone networks, but computers are also a threat. The greatest new source of traffic along the telephone lines is data transmission, the stream of electronic information sent from one computer to another. The difficulty is that the world's telephone lines were not designed to carry the digital codes that computers use. They have been made to carry electrical reproductions (or analogues) of the human voice, and the work of many years has gone into making the lines carry voices as efficiently as possible. Yet what is efficient for voice is in many ways unsuitable for digital computers. The kind of noise produced by Strowger switching can introduce actual errors into data transmission, for a far greater degree of clarity is needed to distinguish the difference between an electrical pulse and the absence of a pulse than to distinguish spoken sounds.

Not only does analogue transmission introduce errors, but it works too slowly for computers. The fastest data-transmission service that the British Post Office carries is 48,000 bits of information a second. Such speed is absurd for the kind of computer that can disgorge and absorb information at a rate of 1.5 million bits a second. What makes the process even slower is that computer signals have to be translated into an analogue before they enter the telephone network and then have to be translated back into digital codes when they come out. They do this by passing through a device called a modem (a short name for modulator demodulator) that is as good a symbol as any for the subordination of the new to the old in communications.

In the beginning the telephone networks were the only available means for computers to connect with each other. But now, with data traffic growing five times as fast as voice traffic—and the number of computers more than doubling every year—a sensible solution might be to allow some other form of network to be used for computers. The telephone authorities, by and large, will fight to the death to see that these new networks are controlled by themselves. In the United States AT&T has promised an all-digital network by 1975, and the British Post Office hopes to have its own ready by about the same time.

But will these networks be fast enough? Could new private companies serve the special needs of special customers better? These are questions that must be answered in the next few years, for the rise in data traffic can make a national telephone service deteriorate because computers tie up huge numbers of lines. They do not talk for three minutes; they talk for hours.

The conflict between analogue and digital is only temporary, however. There is no question other than that eventually all the world's communications will wash back and forth in digital codes and that every country will, in a sense that is both practical and profound, share a common language. □

Some numbers that may be missing from your local directory:

Queen Elizabeth: Buckingham Palace, London, England **930-4832**

The Vatican: **6982**

President Nixon: White House, Washington, D.C. **456-1414**

Casino de Monte Carlo: Monte Carlo, Monaco **30-69-31**

Kronberg Castle (Hamlet's Castle): Elsinore, Denmark **21-15-59**

President Thieu: Saigon, South Vietnam **25-251/256**

Katsura Tea Gardens: Kyoto, Japan **211-1211**

Nathan's Famous: Coney Island, Brooklyn, New York **266-3161**

Shah of Iran: Tehran, Iran **45-171**

Prime Minister Indira Gandhi: New Delhi, India **38-21-60**

Abbey Tavern: Dublin, Ireland **32-20-06**

Tivoli Gardens: Copenhagen, Denmark **15-10-01**

Chief of Doctors: Timbuktu, Mali **38**

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE CARVILLE HANSENARIUM

Tucked in a bucolic corner of Louisiana, the country's only leprosy hospital reflects a changed attitude toward this myth-shrouded disease.

BY ALEX SHOUMATOFF
PHOTOGRAPHS BY JOHN MESSINA

Twenty miles south of Baton Rouge, the Mississippi makes a large, lazy loop around a peninsula that is shared by a women's correctional institute, a colossal CIBA-GEIGY chemical plant, a row of black sharecroppers' houses, and the U. S. Public Health Service Hospital at Carville. Here about 300 of the country's 2,000 registered leprosy patients live and receive treatment. It is an appropriate location for the national leprosarium not only because most active cases of leprosy in this country originate in the South but because the sprawling complex of this old plantation is a good place to contemplate the many ironies that are associated with this disease.

The pain that is caused by leprosy comes, in part, from its lurid public image, which portrays lepers as rotting away in the Valley of the Damned or fleeing into the dark corners of their caves with cloaks drawn over their half-dissolved faces as depicted by Biblical sagas of the *Ben Hur* vintage. Malicious myths about the disease persist: One has the victim's fingers and toes eventually falling off. In his memoir of French penal colonies Papillon claimed that a finger stuck to the handle of a cup offered by a leper. Such incidents are purely apocryphal. Another misconception—that leprosy is a highly contagious disease with open, running sores—keeps well-meaning charitable organizations tearing otherwise useful bed sheets into strips for bandaging. Even casual remarks themselves show that our attitude toward leprosy has made little headway since the Dark Ages. Walter Cronkite, during his coverage of the *Apollo 15* mission, mentioned that, when the astronauts returned to earth, they would have to be "quarantined like lepers."

The stigma originated with the Biblical description of "leprosy white as snow," which referred in a broad metaphorical sense to any disruption of the skin. Flakes of diseased skin are usually devoid of odor and appear as whitish scales. Because skin diseases may cover large areas of the body, the scales may euphemistically be said to resemble snow. There is no evidence that Biblical leprosy was related to the disease known by that name today. The images conjured up by the Biblical connotation might be removed if the words "leper" and "leprosy" were replaced with "patient with Hansen's Disease" and "Hansen's Disease," after the Norwegian scientist Gerhard Armauer Hansen, who discovered in 1874 that leprosy is caused by bacteria similar to the type later found to cause tuberculosis.

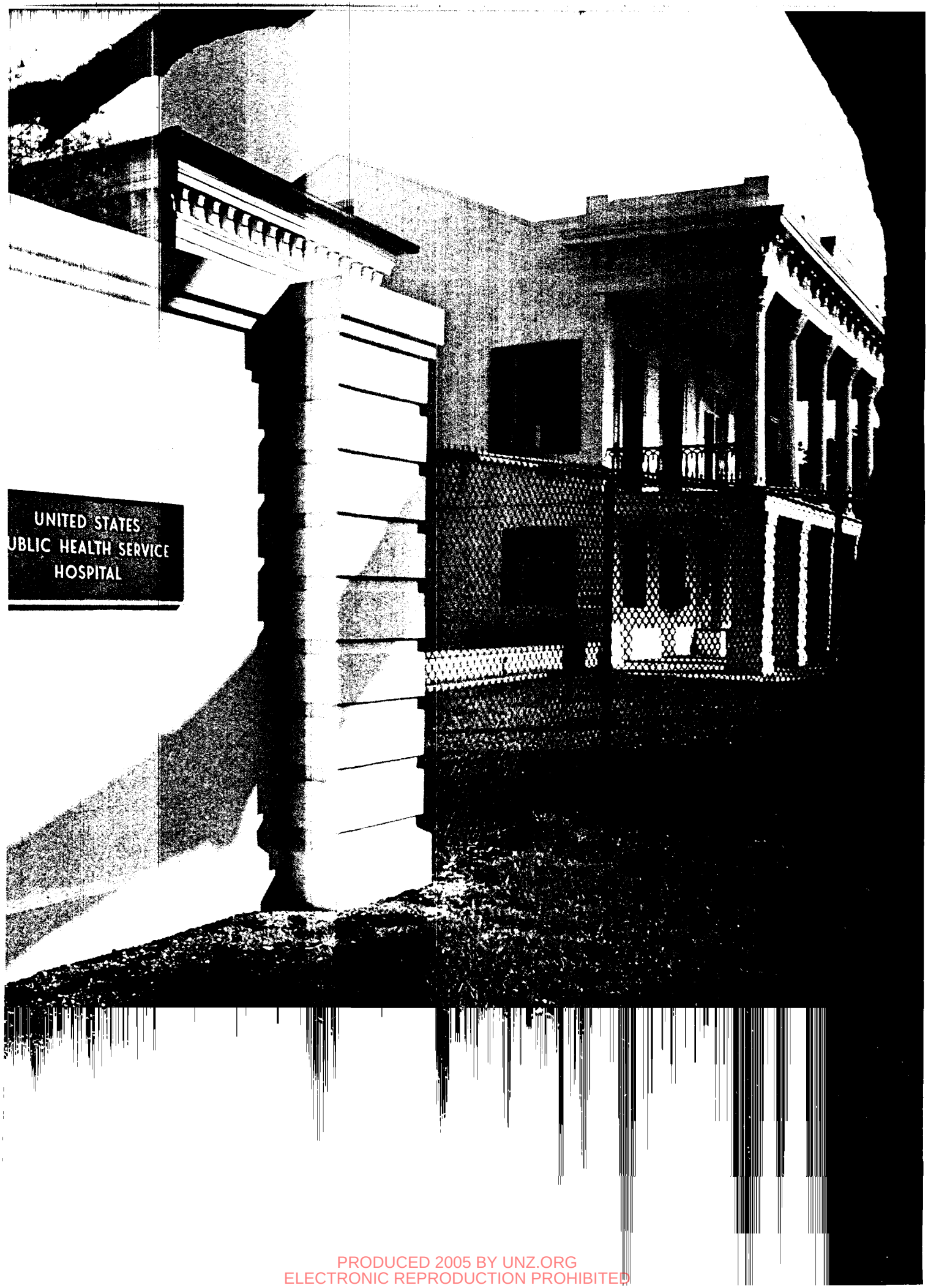
Alex Shoumatoff is a freelance writer. He has contributed to Rolling Stone, *and his first novel will be published next year by Harper and Row.*

The fear of contracting leprosy was so great in the South that in 1894 state legislators, under the pretext of starting an ostrich farm, leased the abandoned Indian Camp Plantation at Carville for use as a Louisiana leper colony. In its early years the hospital was surrounded by barbed wire and protected by guards. The patients assumed aliases to protect their families; and, if they wanted to take a trip, they needed a certificate of permission from the health board of every state they planned to travel through. Arizona would not let them in under any circumstances. Escapees were hunted down by posses and brought back in handcuffs. Suicides occurred and until 1939, when the swamps were drained from the peninsula, malaria, tuberculosis, and iritis—an eye infection that often led to blindness—were common.

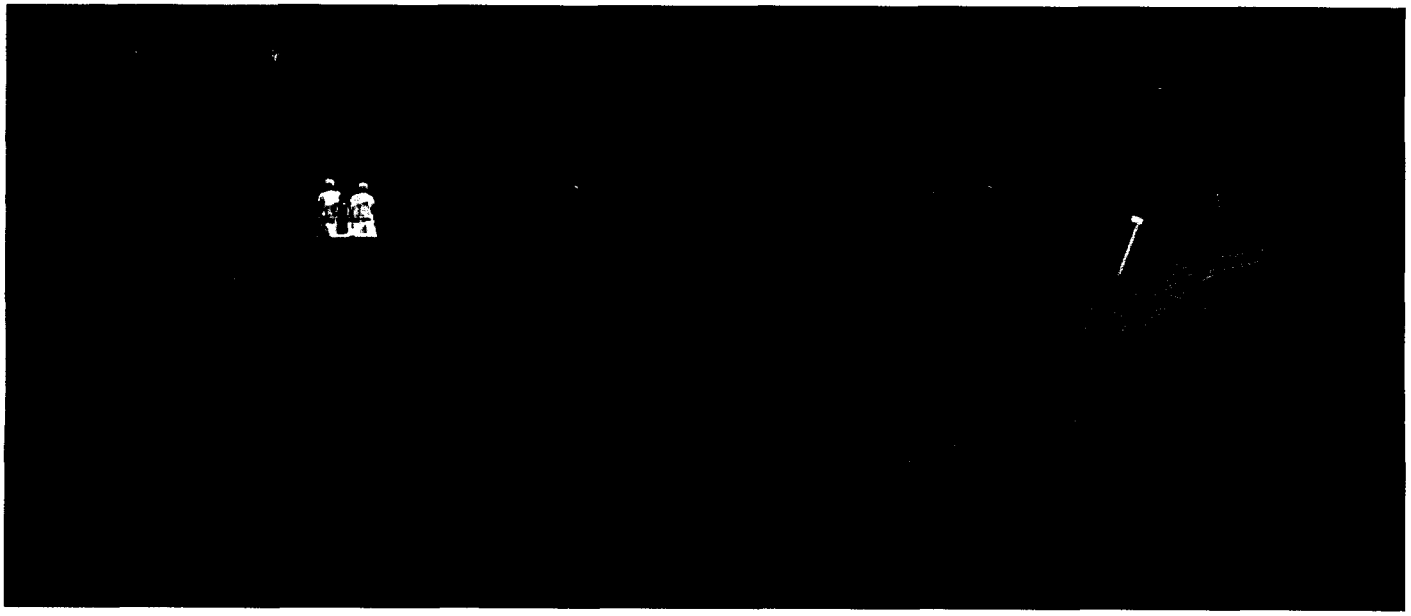
The hospital gradually has changed from a prisonlike compound to a research and teaching facility where guided tours are given twice a day and seminars attract doctors and scientists from Asia and Africa, where there are an estimated ten million cases of Hansen's Disease. It has also become a rest home of sorts for those older patients who contracted the disease before an effective antileprosy drug was discovered in 1943. These patients gradually broke their ties with the rest of the world and now consider Carville their home. Because of deformities, others stayed on after several years of drug therapy had eliminated virtually all the active leprosy bacteria within their bodies. And still others were discharged and have returned when the disease inexplicably reactivated.

There are two kinds of Hansen's Disease patients: those with the tuberculoid form of the disease, who are invariably discharged within a relatively short time, and those with the more obstinate, lepromatous type, whose recovery is often blocked by relapses that may require hospitalization for years or even life. No one at Carville is forced to leave, nor is anyone required to remain against his will. In Cottage Grove there are quarters for the patients who, as often happens, have separated from their former spouses on the outside, married another patient, and are leading a new life within the hospital. Relationships often develop through the dependence and compassion between people who share a common plight. There is a nine-hole golf course; an active chapter of the Lion's Club; an extramural softball team, which, after a long fight, has finally found outside challengers; and an orchid garden in a makeshift hothouse. Most of the patients have no more fleshy folds than do other middle-aged and older people. Few are disfigured. The only visible difference is that their eyes seem con-

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Companionship is one of the few sources of solace for leprosy patients. Whether taking refuge from the normal hospital routine on the golf course, above, of this sprawling former plantation or walking along the deeply shadowed corridors of the main hospital building, right, patients are seldom alone.

Leprosy is a disease of contrasts Society, by and large, fears or ignores it. Yet it is only rarely contagious outside of infected families, and, with modern treatment, it need not cause grotesque deformities.

stantly to probe and assess the sensitivity of outsiders.

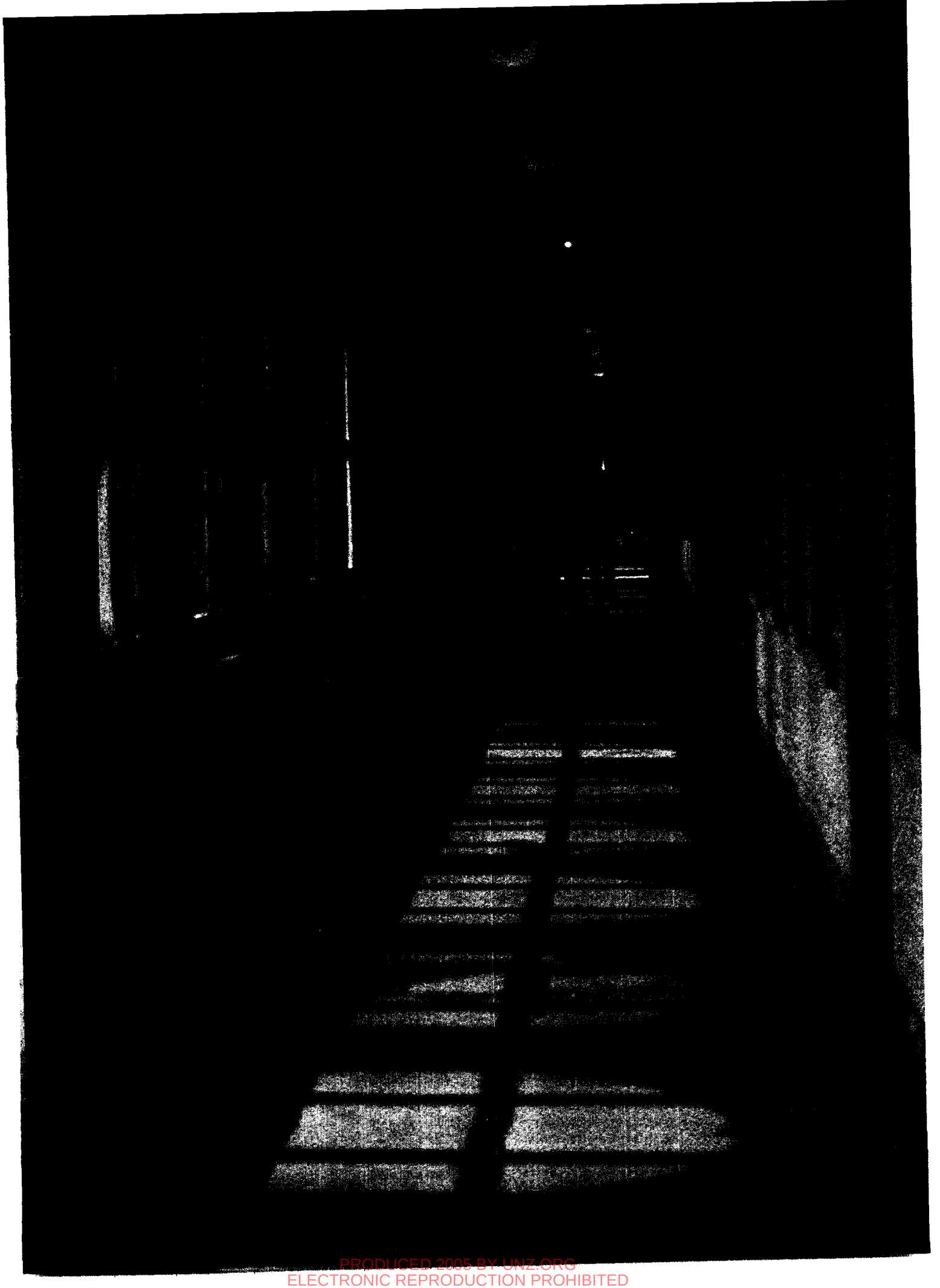
Considering the swiftness and brutality with which they are still ostracized in many parts of the world, it is surprising how much victims of Hansen's Disease can learn about what they have, how they got it, and whether or not they will be cured. Their disease is caused by *Mycobacterium leprae,* a rod-shaped bacterium resembling the kind that causes TB. Since *M. leprae* is one of the few disease-causing bacterium that has never been grown in the test tube, little is known about its metabolism, its method of destroying nerves, or its preference for impairing the vision by attacking part of the eye.

What is known is that, as they multiply, the leprosy bacteria damage increasing numbers of tiny sensory nerves. The skin overlying these nerves becomes insensitive—actually anesthetized—and patients often fail to protect themselves from burns, cuts, and punctures, which are easily infected by still other types of bacteria. Prior to the discovery of antibiotics, surgical amputation of a carelessly infected finger or toe was sometimes required to stop the nonleprosy bacteria from spreading. Even today, if not promptly treated with appropriate antibiotics, these infections can rapidly spread beneath the skin, destroying muscles and bone and leaving nodules and deep craterlike scars in their place. Leprosy bacteria do not selectively destroy only nerves that carry sensations to the brain. They also damage nerves that control muscles, especially those in the hands and feet. The resulting paralysis may leave the affected extremity bizarrely contorted. These disfigurations have made the leprosy victim an outcast for centuries.

At Carville the majority of patients are Mexican-Americans from the Gulf Coast and Lower Rio Grande Valley of Texas. But they come from other groups as well: from the Cajun French in lower Louisiana, the German-Moravians around New Braunsfels, Texas, and the people of mixed origin from a six-block area in Key West, Florida—which, for reasons that are not understood, consistently produces patients with Hansen's Disease. All the evidence indicates that Hansen's Disease was introduced to North America by genetically susceptible immigrants. No full-blooded American Indian has ever been known to contract it. In the lower Rio Grande Valley, which currently produces the largest number of Hansen's Disease patients in the United States, are the remains of old Spanish settlements built between 1540 and 1700, when Hansen's Disease was raging in southern Spain. Living conditions on these converted sharecropping farms are crowded and unsanitary; the poor live in one- or two-room *casuchas,* with children, dogs, cats, goats, and chickens swarming around the yard. In this warm, moist valley a variety of unusual bacterial and fungal infections abound, including scrofula, black-dot ringworm —and leprosy.

In addition to the 225 Mexican-American patients who live at Carville, there are a varying number of outpatients who return periodically. Another three hundred Mexican-Americans are privately treated at skin clinics in the Rio Grande Valley. At the moment treatment for the Rio Grande victims is not, at least logistically, a major health problem, but the communicable diseases division of the Texas Department of Health is campaigning to eliminate the myths about Hansen's Disease, to find new cases by tracking down the close associates of known patients, and to educate doctors who may not have seen the disease before. One study of Hansen's Disease in Texas revealed that the average interval between the

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Because Hansen's Disease does not sap energy, the patients at Carville are not hospitalized in the usual sense. Darryl Broussard, right, a patient, is the hospital's postmaster, a government job. Others, such as Ray Elwood, foreground top left, and Lewis Boudreaux, put out the hospital's magazine, the Carville Star. *Melchor Domingo and his wife, top right, met and married nineteen years ago at Carville, where they still live. Manuel Souza, bottom, the hospital's most industrious hobbyist, tends his orchids in a hothouse that he built on the hospital grounds.*

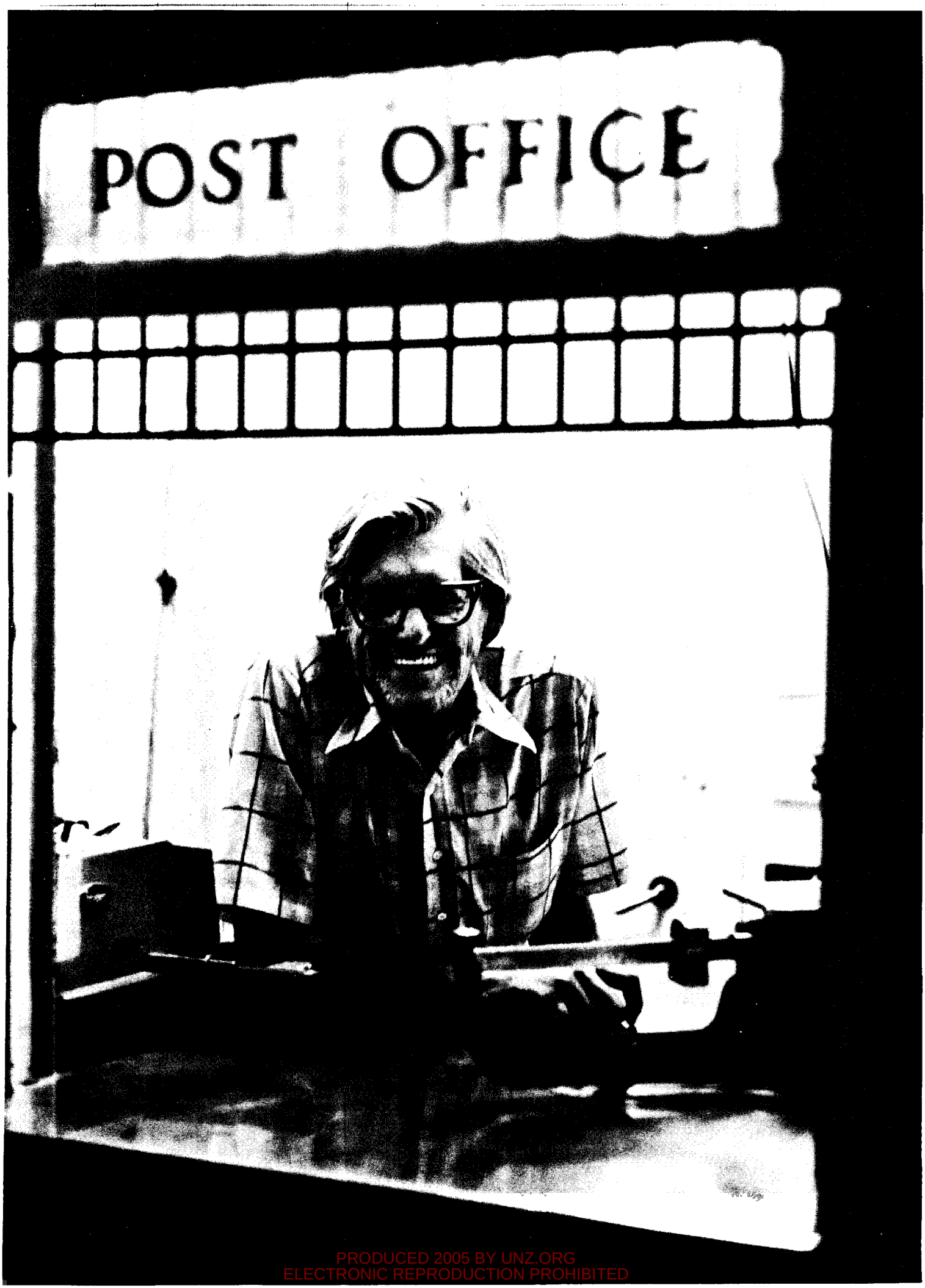
appearance of symptoms and diagnosis of the disease is five years—long enough to cause permanent damage

We know no more about how *Mycobacterium leprae* is communicated than how it spreads through the body and becomes Hansen's Disease. It seems likely that the bacteria are transmitted by saliva, skin-to-skin contact, or the bite of an insect rather than by infection from soil or food, because a direct contact with an infected person is the only consistent similarity among patients. Although Hansen's Disease is described as "mildly communicable in certain stages," none of the nurses, nuns, or doctors in Carville's history have ever contracted it. None of the 141 attempts of doctors to infect themselves or other volunteers is known to have succeeded, and in Kashmir, India, where inbreeding, overcrowding, and squalid living conditions have helped produce one of the most rapid-spreading centers of the disease, only 5 per cent of the people are affected. Even after prolonged exposure among family members the chance of catching leprosy is less than 5 per cent. It is a disease that afflicts only a small number of people—less than 1 per cent worldwide. Most of us are probably immune to it. Those who are susceptible may have an inherited lack of resistance to the disease. For an unknown reason lepromatous Hansen's Disease affects twice as many males as it does females; in the less troublesome tuberculoid form the sexual ratio is equal.

About once every two weeks a new Hansen's Disease victim comes to Carville in the Texas Health Department station wagon driven by Raul Rocha, a garrulous cabby from Laredo who never tires of telling about the time he spent as a patient at Carville. The new patient soon discovers that life there, under the circumstances, is not bad: The food is excellent and everything is free. Many of the patients are financially better off than they were on the outside. Some are able to purchase cars with their social security checks, disability pensions, and wages from government jobs at the hospital. Once the patient accepts that he has leprosy, time itself becomes his most stubborn obstacle.

Although the library includes a leather-bound set of *National Geographic*, even it is rarely taken from the shelf. Because many of the patients are from the illiterate poor, they have had little or no previous recreational or vocational experience, and what to do to fill the time while they are at Carville can become a very real problem. A former San Francisco truck driver named Tommy helps out in the recreation room. The middle fingers of Tommy's left hand began to hurt in 1951. Three years later the pain was

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

There is only one effective antileprosy drug, but it must be taken for life to control the most stubborn infections and for up to five years to halt the mildest form of the disease. Even then the drug is no cure, for the bacteria may mysteriously revive and the disease may recur.

The gravestones in the hospital's cemetery are perhaps the most poignant reminder that leprosy is a lifelong affliction. Unlike other hospitals, Carville maintains its own cemetery to honor the burial requests of patients who have had close relatives interred there or who have remained at the hospital long enough to consider it their home.

diagnosed as friction against the sheaths of small nerves caused by millions of *M. leprae* bacteria. In 1958 he returned to Carville with pain in both hands and has been there ever since. He walked with me down a long, blank corridor where one of the white-gowned Sisters of Charity rode by on a bicycle and a lady passed in a wheel chair propelled by special manual pedals designed to exercise the muscles in her arms and shoulders. "I got a daughter in Laredo," Tommy said. "Her husband drink day and night. He don't know I have the disease. You tell him I saw your wife's father in the leprosarium, he gonna say, 'What the hell is going on?' " We passed by a smoke-filled room where six men were sitting at a poker game in absolute silence and reached his room, which was equipped with a short-wave radio, stereo, TV. "I got everything except healthy," Tommy said. Many there have less.

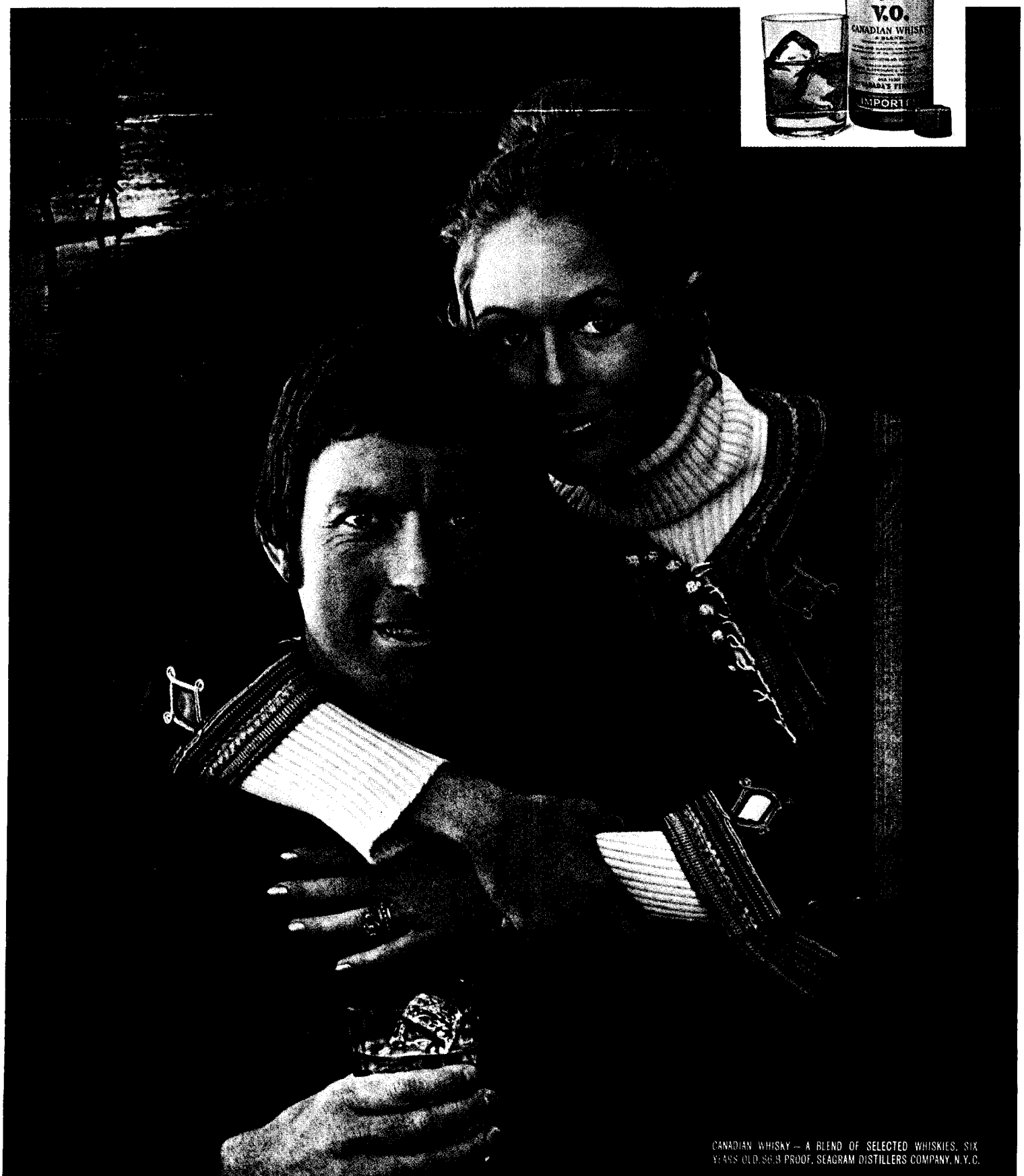
Until researchers find a more effective and faster-acting drug, medication is limited to sulfone drugs, which prevent the bacteria from multiplying. Most of the bacteria then die, and those that remain are rendered inactive. The first antileprosy sulfone drug was discovered at Carville after it had been successfully tested against tuberculosis in guinea pigs (later it was found to be ineffective against TB in man). The tuberculoid form of Hansen's Disease usually is not a problem from a medical treatment standpoint. The majority of people affected with it recover without any treatment; those needing drugs usually require two to five years of sulfone therapy. The outlook for patients with the lepromatous form is best if their infection is treated in its early stages. However, obvious signs of the disease—which would allow it to be detected early—may take as long as twenty years to appear. Unlike other bacteria that multiply rapidly over a period of hours to produce disease, *M. leprae* requires months to multiply in the human body, slowly increasing its numbers until it begins destroying nerves. Also, the symptoms that the disease produces can be very misleading, often causing doctors to mistake Hansen's Disease for some other more common nerve disorder. People who suspect that they may have Hansen's Disease, because they have symptoms similar to those of an infected parent or relative, often are reluctant to seek medical attention—they are afraid of what will happen to them when they are discovered to have the disease. For these reasons many of the patients who arrive at Carville are in the advanced stages of the disease.

After five to eight years of treatment —with a drug called diaminodiphenyl sulfone or DDS—the disease becomes progressively less active. Provided there

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Big Sur. You've had a sunset ride. You deserve Seagram's V.O. The First Canadian.

First in smoothness. First in lightness. First in sales throughout the world.
All the others come after.



CANADIAN WHISKY — A BLEND OF SELECTED WHISKIES. SIX YEARS OLD. 86.8 PROOF. SEAGRAM DISTILLERS COMPANY, N.Y.C.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

After carefully considering how to improve telephone service

At one end of the island of Maui, the village of Hana lies almost isolated. On the island's central plain stands Wailuku, Maui's largest city, and the bulk of the island. In between, presenting a nearly impassable barrier, looms Haleakala, the world's largest dormant volcano.

Haleakala, the House of the Sun, where, according to Hawaiian legend, the demigod Maui caught the sun by its rays and refused to let go until it had promised to pass by more slowly, allowing Man more daylight in which to harvest his fields and bring in fish.

Haleakala, sometimes snowcapped even in this tropical climate, rising some 10,000 feet over the island, and plunging almost perpendicularly down to the sea. With a moonscape crater larger in circumference than Manhattan island.

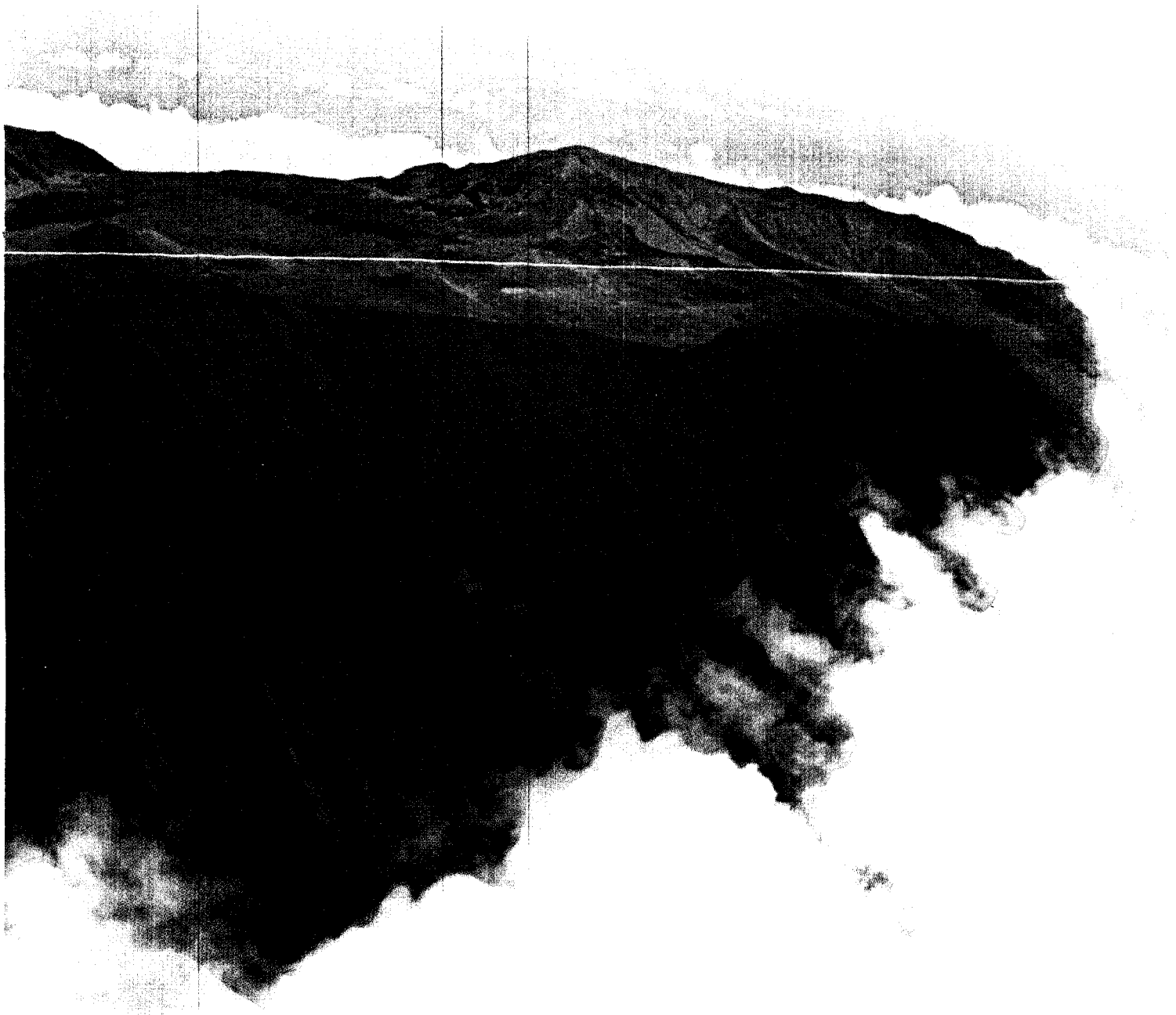
Any way you look at it, a tough place to run telephone lines.

So the Hawaiian Telephone Company, a subsidiary of General Telephone & Electronics, updated the ancient legend by using the top of Haleakala to catch radio microwaves instead of sun rays.

Since microwave beams travel in a direct line-of-sight, Hawaiian Telephone's Hana station transmits calls to a relay station atop Huenue Mountain, 65 miles away on the big island of Hawaii. From there, the signals are beamed back across the water to the relay station on Haleakala,

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

GTE, 730 Third Ave., New York, N.Y. 10017



between Hana & Wailuku, we decided not to move the volcano.

and from Haleakala, the microwave signal hops to the company's call-switching center in Wailuku.

The straight-line distance covered by the Hana-Wailuku link amounts to 157 miles, even though the two points are only 35 miles apart. Nevertheless, the microwave relay system cost less than half of what building a cable route would have cost.

Bringing people closer together with microwave relay systems has become a substantial part of General Telephone's business, not just in Hawaii, but all over the world. In Africa, South America, the Middle East—wherever normal telephone line installations are impractical—GTE International, another GTE subsidiary, has provided better, faster and cheaper communications.

In the last 15 years alone, we have built microwave systems in 51 different countries.

Perhaps this isn't the stuff that legends are made of, because, after all, our work is less dramatic than a demigod capturing the sun. But we think that making it easier for people to communicate with each other is important enough work for mere mortal Man.

GTE

GENERAL TELEPHONE & ELECTRONICS

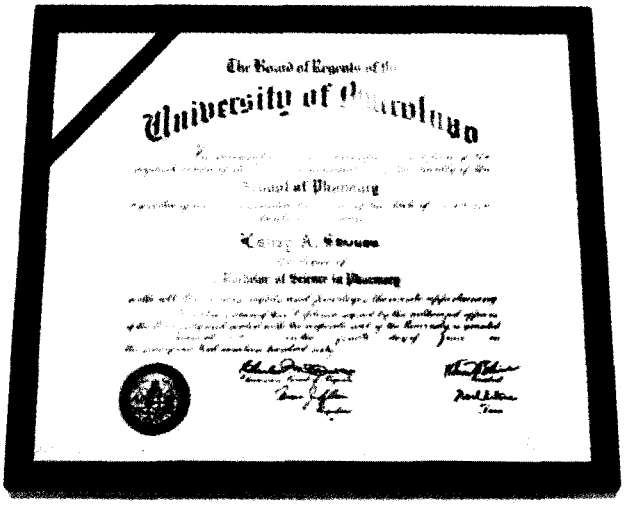
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Let's hear it for the man who helps your doctor help you.

Your trusted, nearby, pharmacist. You know him.

Or do you?

He is a *registered* pharmacist. That means he (or she, because



20% of today's pharmacy students are women) holds an academic degree which, these days, takes five years to earn.

His special knowledge of the chemical, physical and biological sciences, plus the detailed records he keeps of your prescriptions, equip him to assist your doctor by dispensing the precise medication that's right for you.

Your pharmacist's most effective role is that of a professional consultant—a valuable link between you and your doctor.

Oh yes, it is very human to grumble that the medicine he dispenses seems to cost too much. But if we really check it out we discover today's prescription costs three percent less than the same amount cost a decade ago.

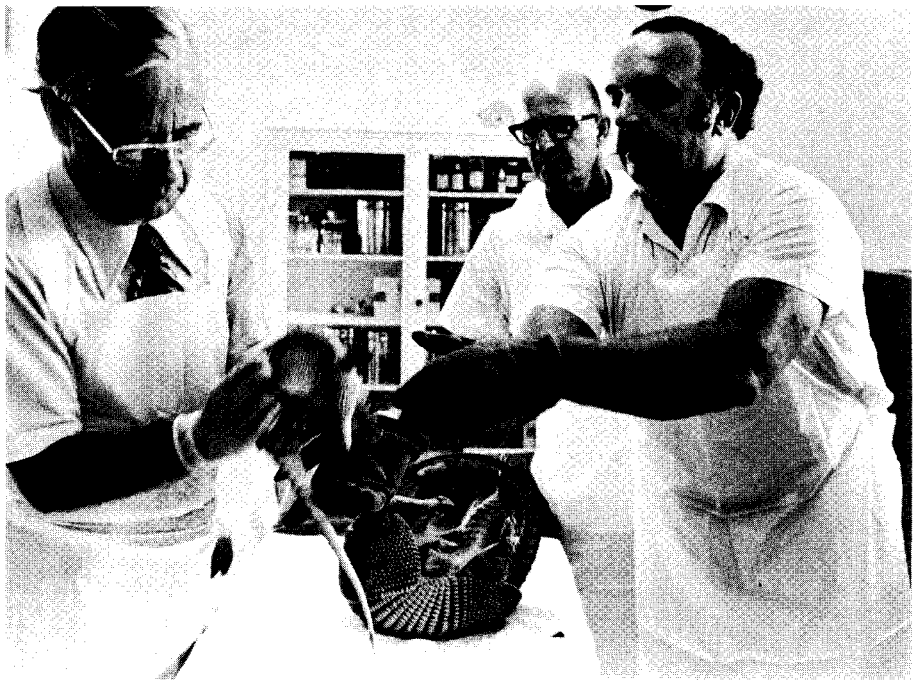
So, try thinking about the *value* of the service your pharmacist performs.

Then stop by and thank him, or her, for a job well done.

The Pharmaceutical Manufacturers

Send for our free booklet. *"When It Comes to Rx Medicines There Are A Lot of ... You Should Ask."* It'll give you a lot of answers. Write to *The Pharmaceutical Manufac... Association, Dept. SR10, 1155 Fifteenth St., N.W., Washington, D.C. 20005.*

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



The bacterium responsible for Hansen's Disease, Mycobacterium leprae, *was thought to infect only man until Dr. Waldemar F. Kirchheimer, left, helped discover that the armadillo was also susceptible after inoculation with leprosy bacteria.*

are no complications such as infections by other bacteria, the patient may be able to return to his life on the outside, but suddenly, and for no apparent reason, after ten, fifteen, or twenty years, he may suffer a violent relapse and have to return to Carville for months or even years. The bacteria—cultured from a newly infected region in this individual—may be immune to the sulfone drugs. There is no cure for the patient in the advanced stages of lepromatous Hansen's Disease. No matter how intense the sulfone therapy, some bacteria remain buried within the walls of blood vessels or in the fibrous sheaths of nerves. When the disease is quiescent and there are no apparently active bacteria, it is spoken of as an "arrested case." Nonetheless, it could flare up again, and for this reason the course that the disease takes is unpredictable.

For most leprosy patients at Carville the promise of a medical cure is unfulfilled. They continue to live as victims of genetic tyranny, ostracized—except in communities similar to Carville, where time is meaningless and nothing is required but to accept suspension from the normal world. To Dr. John R. Trautman, Carville's somewhat reticent director, Hansen's Disease has an impact that is unlike that of any other disease: "It is chronic but not fatal, and it shows."

A major outlet for patients who have decided to take a dynamic approach to their disease is the *Carville Star,* a bimonthly magazine with a circulation of 50,000 in 107 countries. It is edited by Louis Boudreaux, blind from Hansen's Disease. The business manager is Ray Elwood from Key West, who thinks he probably contracted the disease from his grandmother, who was a patient at Carville until her death. Ray's entire face is a deep shade of reddish purple. The discoloration was caused by an experimental drug called B-663, which is being tested on sulfone-resistant patients. The lepromatous bacteria in his body probably became immune to sulfone about eighteen years ago, when he was discharged after a five year stay at Carville and stopped taking drugs. Two-and-a-half years ago, at the age of thirty-seven, he began experiencing the pains that signal an imminent relapse and returned to Carville. During the sixteen years on the outside Ray led a normal life in San Antonio, where he married, had four children, and worked for twelve years as a salesman at Sears-Roebuck before becoming the owner of a small grocery store. "My kids didn't mind how I look," he ruefully recalls, "but my wife was back in the Dark Ages. When the B-663 treatment turned my face this color, she said I couldn't come home. We got divorced about two years ago. Of course, she knows she made a mistake now, but it's too late." Last April Ray married a former patient who is now a high school teacher at Carville.

A year ago the *Star* ran a story under a banner headline that told of the first successful infection of another animal—besides man—with Hansen's Disease. This means that the disease can be intensively scrutinized from the moment the infection begins. The unfortunate creature is *Dasypus novemcinctus,* the common nine-banded armadillo. The armadillo's apparently weak immune response to *Mycobacterium leprae* and its low body temperature of 89 to 95 degrees Fahrenheit are ideal—the leprosy bacteria multiply in man in the cooler regions of the body. The animal's long life span of twelve to sixteen years should enable scientists to learn not only better methods of early detection but also more about the disease itself—how do the bacteria live and how do they destroy nerves? This animal will serve as a model for testing new drugs and may even shed light on how Hansen's Disease is communicated. Because the nine-banded armadillo regularly produces litters of identical quadruplets, scientists can study four animals with identical genetic susceptibility to Hansen's Disease. By comparing how offspring from different litters contract the disease, researches may get some clue as to how the disease spreads and what can be done to strengthen resistance to it.

But all this is a long way off, as Dr. Waldemar F. Kirchheimer, the director of the project, is the first to say. The major stumbling block is that no armadillos have been bred in captivity. "More must be known about the reproductive physiology of armadillos," Dr. Kirchheimer said. Zoologists have found that the female ovulates and is fertilized early in the summer, that there is a period of delayed implantation lasting approximately fourteen to sixteen weeks, and that birth takes place the following spring. But, until they determine whether or not the male is a seasonal sperm producer, young armadillos will have to be captured wild.

Early each morning Dr. Kirchheimer jogs down the road in back of the Carville hospital, under the huge live oaks that are filled with the songs of hidden orioles and the chatter of grackels, past the brown, ceramic silos of his armadillo farm, past the faint hum of the sewage plant, past the lake where an eight-foot alligator lives, along the eastern boundary of the hospital's three hundred and thirty-seven acres, and past the neighbor's black angus grazing near pecan trees. He knows that the day when every patient with Hansen's Disease can be treated in his own community by a local doctor is far away and that until then Carville will continue to perform a unique and irreplaceable function. Sometimes he says that he wonders whether the cure will come from his work with the armadillos or from a discovery about the basic understanding of this bacterial infection made somewhere else. "But even if nothing comes of our work," Dr. Kirchheimer said, "we can leave complete, accurate notes that can be used by someone who comes along with a better idea." Even the doctors at Carville have a view of time that accepts the long, long look. □

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

THE TROUBLE WITH SALT

POROUS POLITICAL SOLUTIONS TO THE ARMS RACE HAVE BEDEVILED ATOMIC SCIENTISTS SINCE HIROSHIMA. THE LATEST ARMS-LIMITATION AGREEMENT IS HISTORICALLY CONSISTENT IN LEAVING ENOUGH LOOPHOLES FOR ENTIRE NEW WEAPONS SYSTEMS.

BY BERNARD T. FELD

Science is an inherently optimistic pursuit, resting, as it does, on the assumption that all natural phenomena may be understood in rational terms alone. Scientists, noted for their congenital optimism, tend to act as if social and political problems are also subject to entirely rational solutions. Among this naïve breed, the group popularly known as "atomic scientists" has shown over the years a special bent for allowing optimism to blind reason.

Perhaps the earliest demonstration of such blindness occurred toward the end of World War II, when the Manhattan Project scientists allowed themselves to be talked into collaborating in the use of their atomic bomb to destroy two large cities of an already defeated Japan. After the war only self-deluding optimism could explain the pride of the atomic scientists in what they thought of as their victory over the War Department in the passage of the Atomic Energy Act of 1947. To accomplish this "feat," they accepted a compromise that gave to the military absolute control over the development of atomic weapons. The Acheson-Lilienthal plan for the international control of atomic energy offered another example. The enthusiastic advocacy of this plan by scientists continued even after it had been changed, in the early 1950s, into a cynical political ploy aimed at extracting the maximum cold-war propaganda advantage for our side.

When the violent debates of the early Sixties culminated in the Test-Ban Treaty of 1963, atomic scientists were again taken in. Their initial enthusiasm for a treaty aimed at inhibiting the bomb race was certainly justified. But then they succumbed to the military in accepting underground nuclear testing as the price for the treaty's endorsement by the Joint Chiefs of Staff. Finally, having given half a loaf, they turned over the rest through a senatorial reservation that perverted the entire intent of the treaty. This "safeguard" reservation, by committing our government to a vigorous atomic-bomb development program *via* underground testing, resulted in a post-test-ban program of underground nuclear explosions that has exceeded anything we or the Russians had undertaken before the treaty.

If this were mere simple-minded optimism, one would expect scientists to learn from past mistakes. And yet in recent years this cheerful naïveté has betrayed scientists into pioneering such "innocent" technological advances as electronic personnel detectors, crop defoliants, "smart" bombs, and an assortment of antipersonnel devices. These new techniques were largely developed in the mistaken thesis that they would help bring the Vietnam War to an earlier or more "humane" conclusion. But, to the shock and dismay of their developers, these advances have been used to visit a series of new horrors on the people of Southeast Asia.

True to form, the atomic scientists are in the process of swallowing yet another political placebo—the SALT agreements of 1972. SALT stands for Strategic Arms Limitation Talks between representatives of the United States and the U.S.S.R. The negotiators have been meeting each year, alternately in Helsinki and in Vienna, since 1969. Their purpose is to put an end to the Russo-American race in the development and accumulation of atomic and thermonuclear (hydrogen) bombs and their means of long-range delivery.

The first significant fruits of SALT were affirmed by Brezhnev and Nixon during their meeting in Moscow last May. These consist of two documents: a Treaty Limiting the Deployment of Anti-Ballistic Missile (ABM) Systems and an Executive Agreement, freezing for a five-year period the permitted number of delivery systems—both fixed land-based nuclear missiles (intercontinental ballistic missiles, or ICBMs) and submarine-launched ballistic missiles (SLBMs).

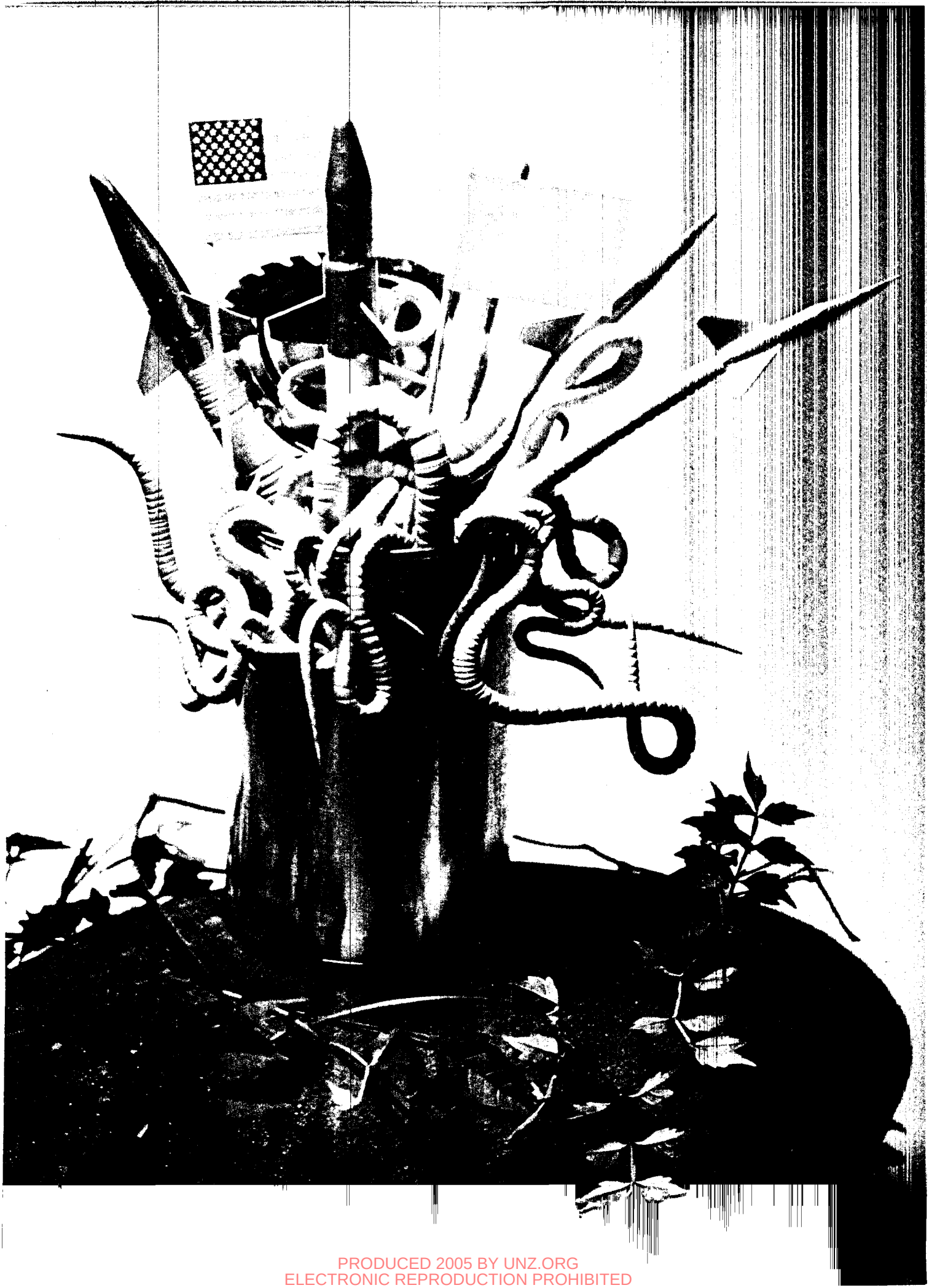
The scientific community has on the whole welcomed these agreements—particularly the ABM Treaty, which the Senate has already ratified. True, a complete ABM ban would have been more useful than the agreed-upon limitation to two relatively small defensive complexes on both sides. But even this restraint permits the Russian and American governments to resist the pressures constantly being exerted by their military technocrats to engage in a race between defensive systems and offensive countersystems. Such a race is hopeless in terms of either side's ever achieving an effective missile defense, and it could only end with both sides having vastly greater overkill capacity and yet less security than in the present situation. The ABM Treaty may avoid this kind of idiocy and save billions of dollars to boot.

The Executive Agreement (the five-

Bernard T. Feld is a professor of physics at MIT, where he specializes in high-energy nuclear physics, and president of the Council for a Livable World.

CHARLES MENDEZ

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

year missile freeze) is another matter altogether. It has come under attack from both the doves and the hawks. The former object that it leaves untouched the astronomical number of nuclear missiles poised on both sides and fails completely to deal with the dangers of new types of weapons and systems. The hawks complain that it accepts a Russian superiority, both in number of missiles and in the size of the nuclear warheads they carry ("throw-weight capacity") and that, therefore, as it stands, the Executive Agreement is distinctly disadvantageous to the United States. The defenders of the agreement admit that both teams of critics have some valid points. But they argue that the freeze prevents a deteriorating situation from becoming worse and that it gives us time to work out a more meaningful treaty.

How will the Executive Agreement really affect the nuclear-numbers game? For the United States, the offensive missile force has been relatively stable for almost a decade at 1,054 land-based ICBMs and 672 SLBMs in forty-two nuclear submarines. The Russians have traditionally lagged far behind in both categories. In the last few years, however, they have been increasing their forces very rapidly. Last year they passed us in the number of land-based missiles. Projections of their rate of construction of nuclear submarines indicate that without a treaty they would have passed us in this category next year.

Considering the numbers as they were finally frozen in May, and as a result of the decision at the summit to include missiles and submarines under construction as well as those already deployed, the Russians end up with half again as many land-based missiles as we have and approximately the same number of sea-based missiles. Furthermore, under a provision in which old (i.e., pre-1964) land-based missiles may be replaced on a one-to-one basis by submarine missiles, the Russians, by exercising all their options, could end up, five years from now, with some 990 SLBMs to our 700.

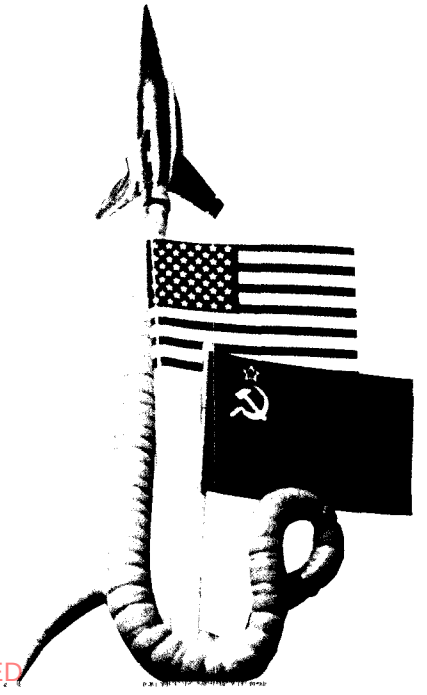
Congressional hawks, prodded by both military and civilian hard-liners, see in this disparity a grave American military disadvantage. They maintain that our SALT negotiators were, at best, outmaneuvered and, at worst, completely bamboozled. When the agreement came before the Senate for its approval, the hawks, who failed to command the congressional majority needed to reject the Executive Agreement, sought to attach "reservations" to its passage. These reservations were intended to put the Russians on notice that we will regard as a violation of the spirit of SALT any pursuit of the options permitted under the agreements. The proposed reservations would also commit our government to engage in vigorous development of all permitted new systems that might result in a strategic advantage *vis-à-vis* the Russians.

Are the hawks' arguments valid? To begin with, it is important to understand that the concern about numbers is, in the present context, irrelevant. The whole idea behind deterrence—the basis of the current Russian-American nuclear standoff—is to prevent a devastating surprise attack by maintaining an invulnerable retaliatory force. The retaliatory force, intended to obliterate 10 million to 100 million people, come what may, requires that from five to fifty thermonuclear bombs be dropped upon the population centers of the attacker. Before the agreement the hawks were insisting that five to fifty delivery vehicles were not enough. With ABM defenses, they said, nine out of ten incoming missiles could be shot down, requiring 100 launchings to achieve 10 strikes. Any increase in ABMs calls for an increase in ICBMs. But, now that we and the Russians have agreed to eschew antiballistic missile defenses, this ICBM numbers game is no longer meaningful. Not only are the thousands of missiles that are permitted to both sides by the SALT agreements superfluous, but, in view of this vast mutual overkill capability, such differences in numbers as may result from the details of the Executive Agreement are academic. The objection of the hawks on this basis constitutes an obvious red herring.

Besides, it is not even true that the Russians have a larger number of deliverable nuclear weapons (or nuclear explosive power) than we. The SALT agreements do not cover intercontinental bomber aircraft, in which we have a huge superiority, nor do they take into account the so-called tactical nuclear weapons—most of them having more than the explosive power of the Hiroshima and Nagasaki bombs put together—that we have stationed by the thousands in Western Europe and on aircraft carriers that rove the seas of the world.

Even considering only those ICBM bombs covered by the SALT Executive Agreement, the advantage conceded to the Russians is largely illusory. Their superiority in numbers of land-based ICBMs is predicated largely on an accumulation of relatively vulnerable, cumbersome, and old-fashioned rockets. It is true that they have the option of replacing those that were deployed before 1964 by new-style submarine-based missiles. However, their "Yankee" submarine systems are technically inferior to our Polaris submarines—not to mention our newer Poseidon and the proposed Trident mis-

ONE IS TEMPTED TO SUGGEST THAT THE VOCAL GRIEVANCES OF THE HAWKS REPRESENT A LARGE-SCALE PUT-ON.



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

sile-launching submarines. Our SLBM systems are superior both in range and effectiveness. In addition, since our submarine missiles can be fired over much longer distances than those of the Russians, the volume of the oceans available to our SLBM fleet for maneuvering and hiding is considerably greater. Furthermore, most of our submarine-launched ballistic missiles are in the process of being fitted with multiple warheads (ten per missile). Hence, even if the Russians construct their maximum permitted number of sixty-two missile-launching submarines —as compared with our forty-four –we will remain quantitatively (in the number of deliverable atomic bombs) and qualitatively (in the capability of their delivery) well ahead of the Russians through the entire period of the interim agreement.

This brings us to the most significant aspect of the ICBM competition—the relative effectiveness of our multiple, independently targetable reentry vehicles (MIRV) versus the gigantic Russian SS-9 ICBMs. The interim SALT agreement limits the Russian SS-9 deployment to around 300. Our MIRV deployment, not covered by the agreement and already under way in both our land- and sea-based missiles, is in no way inhibited by the missile freeze. As a result, our one thousand Minuteman ICBMs will soon command about three thousand separate targets, while our 400-odd Polaris submarine missiles are well on the way to being transformed into approximately four thousand independently deliverable bombs.

Admittedly, each one of these necessarily smaller bombs is capable of devastating a much smaller area than is each single Soviet twenty-five-megaton SS-9. But, ton for ton, the same explosive power, when spread among a number of separate bombs, is considerably more destructive than in a single weapon. The U.S. multiple warheads more than outweigh the superior bang of the U.S.S.R.'s SS-9. Specifically, it takes eight of our Minuteman III missiles, each carrying three independently targetable warheads, to flatten the same area as one Russian SS-9; but, in so doing, the multiple warhead missiles can strike twenty-four separate targets (separated by hundreds of miles, as are, for example, Washington, New York, and Boston), each with a hydrogen bomb ten times the strength of the Hiroshima bomb. At the same time the single SS-9 missile, even though one thousand times Hiroshima strength, can be used against only one target. Clearly, in the trade-off between big missiles and MIRV, we have won the better deal.

What is to prevent the Russians from installing multiple missiles (MIRV) in their SS-9s and thereby turning their numerical and weight-lifting superiority into a real strategic edge? Nothing but the fact that they do not yet have a deployable MIRV and, in fact, have not even tested one. Furthermore, the most recent advances (if that is the right word) in missile accuracy (as illustrated by the "smart bombs" now being tested in Vietnam) render futile the race to improve fixed, land-based missile systems. By the time the Russians have installed multiple warheads in their missiles, all ICBMs will be as obsolete as long-range bomber aircraft are today. By that time, unless the deterrent system has completely broken down, we shall both be relying for our "deterrence" on our submarine missile fleets. We will probably both be off in some new direction of weapons development—for example, a submarine offense-versus-defense race—and nobody will pay any attention to who has more or fewer, bigger or smaller, ICBMs. The SALT missile-freeze agreement affords no significant advantage to either side —*neither to us nor to the Russians.*

Why, then, all the wringing of hands and gnashing of teeth in the Pentagon and among the members of the Senate Armed Services Committee? How is it that this administration, acutely sensitive to real or imagined arms gains by the Communists, has been willing to stake the nation's future on an agreement that *appears* to concede so much?

Not being privy to the deliberations of the National Security Council, I can only hazard a few conjectures as to the reasons. The simplest is that the administration realized that its apparent concessions were likely to elicit a certain amount of political flak but, nevertheless, chose to make them for the sake of achieving the necessary first step along the route of real nuclear disarmament. This explanation is at the same time the most optimistic and the least likely.

More political motives suggest themselves. Concessions to Russian pride—in the acknowledgment of parity or even superiority in offensive missiles—could have been the price President Nixon had to pay for Russian acquiescence to a summit meeting, especially since it coincided with an escalation of our activity against North Vietnam. At the same time Nixon had much more to gain in the United States from an agreement that appeared to sacrifice American superiority to the hope of ending the arms race. Such a sacrifice would guarantee a leap in the President's popularity among liberals at home and abroad.

Finally, we cannot exclude the possibility that these SALT agreements are part of a scheme for deflecting the nuclear arms race into a direction more "favorable" to the United States. The agreements concern only the numbers of offensive nuclear missiles; they conspicuously fail to slow the race to develop new weapons.

Indeed, following the signing of the agreements, almost no time was permitted to elapse before the military started to call for accelerated development of all nuclear systems that were not explicitly prohibited by SALT agreements (and even ABMs, which were). One is tempted to suggest that the vocal grievances of the hawks represent a large-scale put-on whereby the Pentagon and the administration, represented by Defense Secretary Melvin Laird and Sen. Henry Jackson, plan to float through the Congress, on a flood of crocodile tears, a whole raft of commitments and appropriations for new weapons systems: larger nuclear aircraft carriers, an ultra long-range missile submarine (ULMS or Trident), B-1 supersonic bombers, SCRAM air-to-surface missiles, military space shuttles, and superaccurate missile guidance systems that could be used for "surgically precise" nuclear strikes against enemy missiles. Such renewed arms proliferation, stemming from an arms control agreement, would be consistent with historical patterns. Atomic scientists, in particular, once again will have been deceived by their optimism into thinking they had won the battle.

And yet that very same optimism does not permit us to give up. Everything depends on how we use the five-year moratorium provided by the missile freeze. Congress is not, after all, compelled to buy all these new arms systems just because they are not prohibited by SALT. Nor is it foreordained that we scientists must lose the political battles that will determine the outcome. We are not necessarily alone in the battles, and we are not even limited in our influence only to U.S. academia. To the considerable surprise of many Americans, the Russian scientific community, showing unexpected political independence, seems to have been primarily responsible for stopping further deployment of the premature Moscow ABM. From all available indications our Russian counterparts must be as concerned as we about slowing the arms race and equally alarmed by Nixon's allegation that Brezhnev "promised" to move at top speed in every new direction of arms development permitted by SALT.

The reservations proposed by the hawks to the SALT agreement are now part of the record. This record can be annulled in the next session of Congress only if it refuses to sanction or appropriate funds for new weapons. Unless this can be done, the SALT Agreements of 1972 will go down in history as another defeat not only for the atomic scientists but for all who believe that rationality still has a place in political processes. □

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Neurosis in Dogs

Unwittingly but relentlessly, we are putting our canine companions in a behavioral and genetic bind.

BY MICHAEL W. FOX

DRAWINGS BY JOHN DAWSON

In the affluent world of today virtually everyone has what used to be the aristocratic option of owning a dog. So many people have chosen this option that dog owning has become largely responsible for the size of the $4.6-billion pet industry. More significant from the dog's point of view, modern life styles have changed so radically in the past few decades that we are dragging our pets through the same abrupt changes that have resulted in human neuroses: urbanization, technologization, reduction of family size, and crowding stress. One lamentable result has been the burdening of the dog with a whole range of emotional problems that surprisingly parallel our own.

To a remarkable degree, the evolution of the dog has accompanied human cultural evolution. Some 10,000 years ago, when *Canis familiaris* first moved close to man's campfires, it, like man, lived largely a hunting and scavenging existence, serving man by warning of the presence of large animals and possibly learning to bring down game. With the development of agriculture a thousand or so years later, man and dog became more sedentary, learning to tend flocks of sheep and goats and to protect homesteads. At the same time society began to stratify. Small elite classes emerged, composed of aristocrats who, for the first time, could afford to keep nonworking animals. These prehistoric pet fanciers learned surprisingly subtle techniques of genetic engineering, developing such extraordinary canine mutants as the Papillons and Pekingese-like creatures that appear on Etruscan vases and in Grecian friezes.

Throughout European history pets carried much the same social significance as did clothes or dwellings. A peasant, for example, was not allowed to have a pet above his social station, such as a coach dog, lap dog, or falcon. These were exclusively for the aristocracy. In fact, the peasant could usually not afford to feed a nonproductive pet.

People keep dogs these days for a few old reasons and a lot of new ones. Status is still heavily involved. In the southern United States a good coon hound will fetch as much as $2,000—an amount wildly beyond any realistic economic assessment of what the dog does for the master. Rather, the dog represents for the owner a ticket into an elite group of hound owners as well as a Freudian projection of his own ego. Many dogs fulfill the desires of frustrated masters, representing power, aggression, sexual freedom, virility. A small man is often seen with a mastiff or great Dane. A fierce dog on the end of a leash often reinforces the owner's confidence as would any other weapon.

People tend to find in dogs what they cannot find in other people. Among the international dog-show set there is a large clique of homosexuals who specialize in poodles and similar breeds in which they find appealing qualities of grace, style, and intelligence. Curiously, these dogs become so attuned to their gay owners that they tend to avoid "straight" males and females. Show people tend to mix their feelings for dogs and owners. A Connecticut woman who wanted a stud for her Basenji turned down a neighbor's dog because she didn't like the owner. Instead, at considerable expense and risk, she flew the dog to a stud in faraway Virginia.

Dogs must now substitute for both concrete and abstract aspects of human experience that we are often denied by modern modes of living. A Greenwich Village photographer acknowledges that his Airedale provides a link with nature and makes him feel more authentic, less anonymous in the confines of New York concrete. A dog in the home provides many of us with someone to come home to—reliable, accepting, trusting. Dogs are honest, existential, living only for the moment: When we receive an enthusiastic canine greeting, we trust its sincerity. A dog may be a confidant for a lonely child or a link to an often-absent father through joint training and exercising of the animal. Some child psychologists are now using dogs (called canine cotherapists) in hospitals. They find that a child who doesn't relate to peers or parents may trust a dog, which he finds loving, accepting, and reliable. The therapist can often talk to the child about the dog, and, once this first bond

We ask dogs to be child therapists.

Michael W. Fox is a veterinary surgeon and associate professor of psychology at Washington University in St. Louis.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

is established, it may lead to a stronger bond with humans.

To fulfill such ends, man has to a considerable extent remade dogs in his own image. He has selectively bred, for example, dogs with a babyish appearance—pugs, Chihuahuas, Pekingese—that elicit human parental responses. Many of the most popular dogs exhibit the "Peter Pan syndrome," or neoteny, remaining docile, dependent, and perpetual puppies throughout their lives. Such dogs commonly serve as child substitutes for childless couples and singles. One of my graduate students and his wife who do not plan to have children recently adopted a dog from the Humane Society for the conscious purpose of absorbing their unused parental affection.

We expect, of course, that such a dog can absorb all this affection without becoming spoiled—an almost impossible demand. With an abruptness unheard on an ordinary evolutionary time scale, we are asking dogs to change from fierce hunters and protectors into docile groupies willing to accept any stranger, tolerate children, and ignore cats. We expect them to allow the repeated invasion of their territory by mailmen and meter readers. After breeding dogs to be sexually promiscuous and early to mature (to facilitate further selective breeding), we then ask them to live a life of nearly. total celibacy bypassing the titillating odors of dozens of bitches in heat in our crowded urban and suburban communities. The human equivalent of these odors would be a band of beckoning naked women parading through the neighborhood. On a longer-term basis our obsession with dog shows is resulting in genetic changes that are harming many breeds. Constant inbreeding to achieve exaggerated characteristics —long noses, short noses, low hips, short legs—encourages increasing mutations toward brachycephaly (round heads), achondroplasia (short limbs), retinal blindness, floating kneecaps, and dwarfism. We breed for show gazelle-like Irish setters that could never be used in the field, as are their heavy-boned, working counterparts. Spaniels and retrievers that look graceful in the ring are, like as not, virtual zombies prone to posing immobile for hours and retaining none of their old work habits. We have recently learned how to freeze dog semen and will probably soon be disseminating these bad (show) genes, which often carry physical defects and emotional instability.

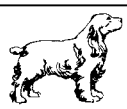
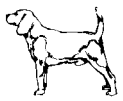
The growing custom of using dogs to accommodate human needs often results in turnabout demands by the dogs themselves. After one woman brought her dog into New York's Animal Medical Hospital for expensive orthopedic surgery, the staff found that it refused

Many dogs fulfill the desires of frustrated masters. A fierce dog on the end of a leash often reinforces the owner's confidence as would any other weapon.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

This chart is only a general guide to breed behavior. The handling history of an individual dog can change its behavioral characteristics considerably. For example, dogs vary widely according to which kennels they come from. Normally docile cockers and poodles may turn out to be unstable and vicious if raised in certain kennels.

One-mannishness refers to the preference of some breeds, such as chows, for a single master; others, such as beagles,are less discriminating.

BREED	TYPE	LIKES DOGS	LIKES PEOPLE	EMOTIONAL STABILITY	TRAINABILITY	NEED FOR FREEDOM	ONE-MANNISHNESS	
GOLDEN RETRIEVER	SPORTING	+	++	++	+	+	–	
COCKER SPANIEL	SPORTING	+	+	+	+	+	–	
AFGHAN	HOUND	+	±	±	±	++	±	
BEAGLE	HOUND	+	++	+	+	+	–	
MALEMUTE	WORKING	±	+	+	±	++	±	
GERMAN SHEPHERD	WORKING	±	±	±	++	+	±	
BULL TERRIER	TERRIER	–	++	+	+	+	±	
IRISH TERRIER	TERRIER	±	++	+	+	+	–	
YORKSHIRE TERRIER	TOY	±	+	+	+	+	–	
POODLE	TOY	+	+	±	++	+	–	
BULLDOG	NONSPORTING	±	++	+	+	+	–	
CHOW-CHOW	NONSPORTING	±	±	+	+	+	+	

– INDICATES ABSENCE OF TRAIT;

+ INDICATES PRESENCE,

++ STRONGLY PRESENT;

± MEANS BEHAVIOR MORE STRONGLY INFLUENCED BY ENVIRONMENT THAN BY GENES.

to eat from a bowl. They called the woman, who replied that at home she always seated her dog in a chair and fed it with a spoon. A woman staffer at the hospital tried this routine and had no further trouble. A couple who were worried by their dog's upset stomach hit upon the humanoid solution of paregoric acid before bedtime. In a short time the dog became addicted to the opiate. It went through severe withdrawal symptoms before finally kicking the habit. Two German doctors describe a case in which a dog that vomited one day was promptly showered with sympathy by its master; almost at once the dog began vomiting each day for attention. Such canine problems, of course, merely offer lonely masters the opportunity to bestow more affection or worry upon their charges.

As a result of canine neoteny created by selective breeding and overindulgence, domestic dogs are losing the resilience they once had. We carried out comparison studies between lab-raised beagles and Chihuahuas, two rather neoteinic breeds, and coyotes, wolves, and jackals. Members of each breed were left in isolation for several hours. The beagles and Chihuahuas urinated, defecated, and cried constantly; but the wild species seemed unaffected.

Fritz Perls, founder of Gestalt therapy, noted that most behavioral disorders in man are related to one form of dependency or another, such as fear of rejection, jealousy, and immature dependence upon external support or sanction. Similarly, in the dog, a threat to, or disturbance of, the relationship with the owner may be the cause of several disorders. This is especially evident in overindulged and overdependent dogs, particularly of the more infantile breeds. One Pekingese, for example, had served for years as a child substitute for a couple until the woman finally had a baby. Shortly afterward the dog developed total paralysis of both hind legs. It was rushed to a veterinarian, and soon after the owners had left, it was up on all fours behaving normally. Back home again the paralysis returned. It was a classic case of conversion hysteria, in which the dog could not emotionally handle the competition of the new baby for the affection it had once monopolized.

Sympathy lameness is another neurotic condition often arising in overindulged dogs. Not long ago I was brought a mongrel that had been hit by a car and had soon afterward developed a limp in one front leg. As soon as it arrived on the university campus, it began chasing squirrels, showing no lameness. On the leg I could find only a slight abrasion but no cause for pain or limping. The owner took the dog home, where the limp resumed. I told him to ignore it. The

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

limp stopped almost at once. Sympathy lameness can be even more serious when a vet operates on a limb or hip: The dog may refuse to use the limb long after it should, and the muscles may atrophy.

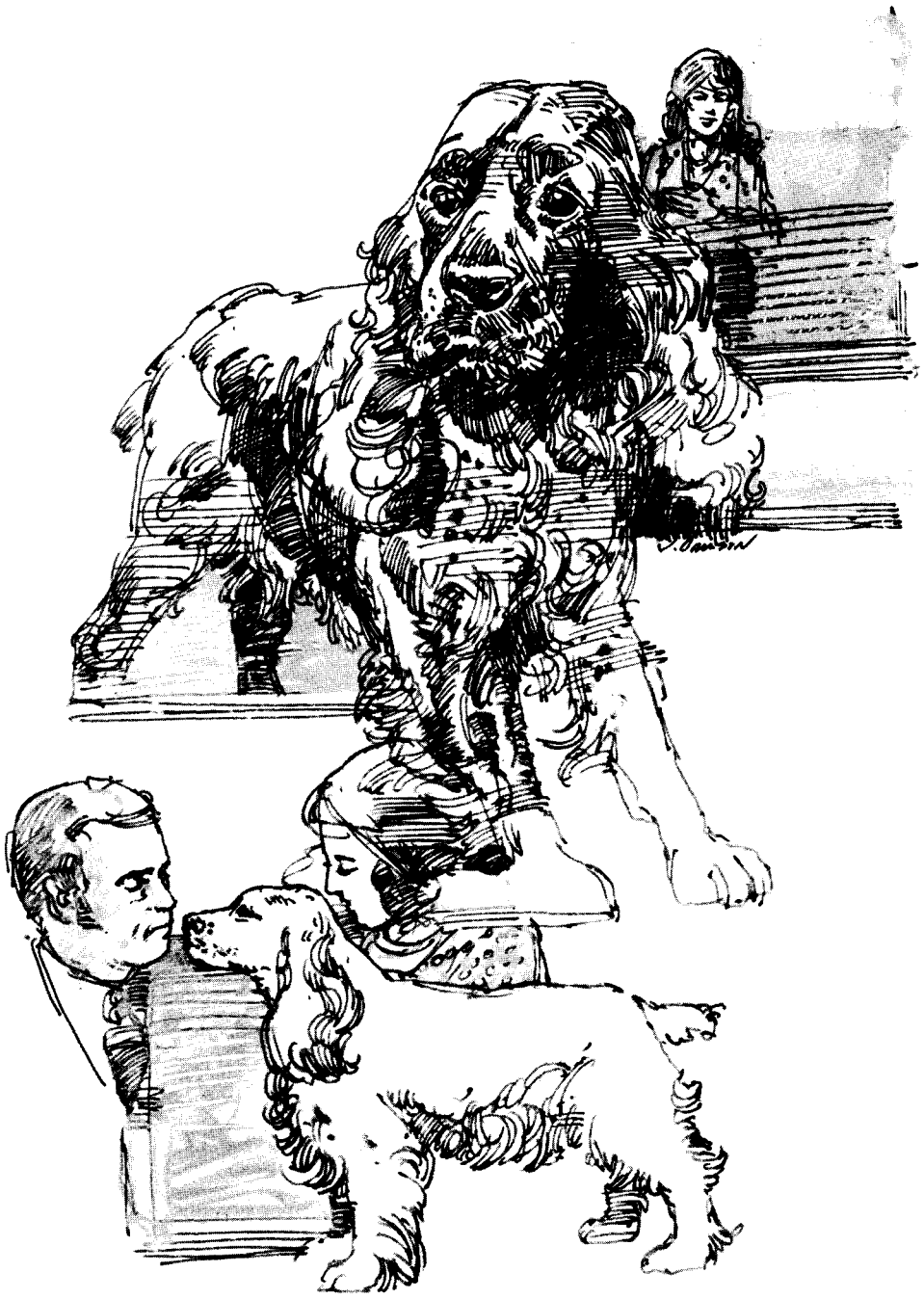
Owners who work during the day put special stress on their pet. The dog —bred to need companionship and then abandoned most of the time—is caught in a double bind. The commonest reaction is destruction of household objects, such as furniture, books, clothes, and especially objects the owner prizes, such as a pipe or slipper. When the owner comes home, the lonely dog may overreact, greeting him excessively, racing from room to room and urinating uncontrollably (a sign of submission). Our university photographer has a dog that promptly defecates on the owner's bed each time it is disciplined, left alone, or too much attention is shown to the rival pet parrot. When the owner of a Dalmatian leaves the house, the dog carefully opens every door, then races to the bedroom and removes the heirloom bed cover—without ripping it. Then, on the woman's side of the bed, it digs a hole through the sheets and curls up in the hole to await her return (she pays the dog more attention than does her husband). One day the frustrated dog dug all the way to the springs and then buried a banana in the hole.

When they have grown accustomed to being the center of attention, dogs often inhibit normal human emotional relationships. Several situations are especially common. Many girls go out with boys only if their dog likes them. Emotional triangle problems often involve a dog's jealousy of a boyfriend, who may even be attacked. This is a special danger in this age of crime consciousness, when so many girls have attack-trained guard dogs. One girl, who owned a jealous cocker spaniel, got married and subsequently found that her dog would lie in wait behind the sofa for her new husband, attacking him every time he came into the house. I recommended that, before kissing her husband, she kiss the dog, and the problem was solved. I receive several calls a year from baffled husbands who are forced to sleep on the sofa because their wives are under constant guard.

Dogs may become so accustomed to living with humans that they seem to lose interest in other dogs and forget key biological functions. Hand-raised dogs may fail to breed with other dogs, preferring instead to try humans. Spoiled bitches—especially those accustomed to sleeping on the owners' bed—may suffer acutely if they become pregnant. If they are banished to the cellar as delivery time approaches, gestation may be prolonged due to psychological stress. They may do nothing to assist the births or to remove fetal membranes, and so the owner must help out.

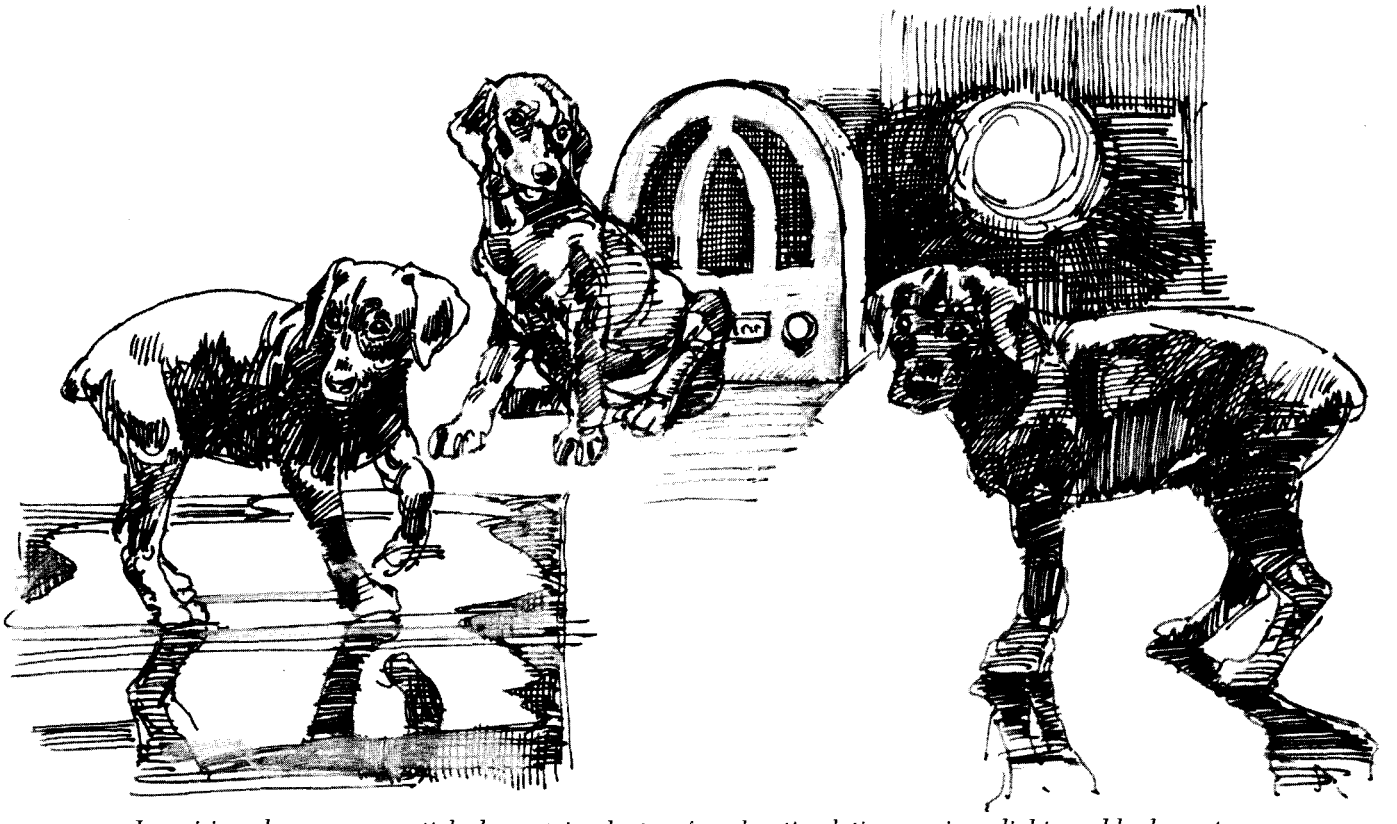
Suppressed urges in dogs result in a whole panoply of queer behavior. Most canids, for example, customarily use urination for territorial marking and urinate whenever they find a strange scent. Modern dogs are hard-pressed, however, to respond to the myriad signals they may encounter in crowded neighborhoods and may urinate (or try) as many as two hundred times during an evening walk. If nothing else, this behavior may be leading to an unprecedented degree of sphincter control.

The boredom of human-imposed confinement weighs heavily on dogs. One Schnauzer kept in a backyard customarily played with a dog that lived on the other side of the fence. One day the vacationing neighbors took the



Accustomed to being the center of attention, dogs often inhibit human relationships. Many girls go out only with boys their dog likes.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



In raising dogs, an essential element is plenty of early stimulation—noises, lights, cold places to walk. Stimulated dogs become more responsive and adaptable.

other dog away for two weeks. The Schnauzer promptly began compulsively pacing, wore a track several inches deep in the yard, and lost five pounds (a serious amount for this dog). He could be distracted from his exercise only with great difficulty. Such compulsive neurotic pacing is common among zoo animals confined to small spaces. When dogs have companionship, on the other hand, the size of the space they live in seems less important. Modern dogs may feel the need to mark their territory indoors as well as out. One house-kept dog carefully urinated on each leg of the children's bed every night. An Afghan adopted the habit of peering alertly out the window and, each time he spotted a male dog in the street outside, of lifting his leg onto a nearby stereo speaker.

When we do not allow females in heat to mate, they may not only go through realistic pseudopregnancies, complete with lactation and swelling, but also displacement behavior that is almost fetishistic. The bitch may adopt a slipper as a phantom puppy and guard it fiercely in a nest of fallen clothes. One farm couple owned an Irish setter that hunted and killed baby rabbits. When it became pseudopregnant, it dug up several of the baby rabbits, brought them home to its nest, and tried to nurse them.

One way to soften the isolation of lone dogs, when it is impossible to provide a canine companion, is with another pet. At times any other living thing seems to satisfy some dogs' craving for a playmate. A girl's overindulged toy poodle had pups, which it typically did not know how to care for: The owner had to do everything. But, since she worked during the day, she had to sell the pups, and the mother began tearing up the house. Trying a hunch, I gave her a box turtle. As soon as the girl put the turtle down, the dog began licking its backside as though it were a puppy. When the turtle defecated, the dog cleaned up afterward. Then the turtle walked to the dog's dish and ate some food, and the dog responded by trying to nurse the turtle. The turtle/poodle relationship lasted for two beautiful years until the turtle fell off a balcony, cracked its shell, and died.

Sometimes pets need pets.

One of the saddest human-induced behavioral disorders found in dogs is kennelosis, or institutionalization syndrome, which seems to result from confinement and lack of stimulation during the critical formative months of puppyhood. It is for this reason that pet shops begin to mark down the price of puppies as they get past about twelve weeks old. By sixteen weeks the price is usually down by half, because the damage has been done. When such dogs are plunged from a cage into a complex human environment, they commonly suffer a crippling nerve overload and withdraw into a dark corner—both psychically and physically. A woman who bought a Belgian dog called a Rottweiler wanted to take it from the United States to England, but the dog, at the age of three months, had to be left in quarantine in England for six months. The woman visited the dog every weekend, and, as a result, the dog became well adjusted to people, but, when its sentence was up, it could no longer handle itself outside of its cage. The first day out of confinement it fell down the stairs. The second day it fell out of a station wagon, and after that it refused to come out from under the sink. The woman wrote to me, since she wanted to show the dog, but only after long treatment with mild tranquilizers and gentle immersion in the real world

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

did the dog begin to shake free of its kennelosis syndrome. The army's training program for attack dogs was upset temporarily by kennelosis, when the handlers neglected to provide a sufficiently diverse environment for puppies. Although the dogs' intelligence was well developed and they were entirely acclimated to people, they freaked out when they first reached a forest, where they would spend most of their adult lives working. The mere rustling of leaves was enough to make some of them defecate in fear. Now the dogs are raised in a sylvan environment from earliest puppyhood.

We are only beginning to learn something about how best to raise dogs. The process bears remarkable similarities to the raising of children. The first essential element is plenty of early handling and stimulation. We have found that those pups given a regular program of stimulation—noise, lights, cold places to walk—become more responsive and adaptable than nonstimulated peers. The second important element is socialization, or abundant early contact with people. This handling must be started by about six weeks of age: Guide dogs' trainers have found that, if socialization is delayed until twelve weeks, learning is so severely inhibited as to make the dog useless for guiding.

Because man is so drastically bending dogs to his own purpose, it is only fair that he at least learn to combat and forestall the neuroses that have become so common. Perhaps the best thing we can do is to imitate nature to a certain extent. We have learned a great deal about raising dogs by watching how a wolf raises its cubs. A wolf mother is extremely affectionate and tolerant toward her cubs—up to a point. When cubs overstep their bounds—by playing too roughly with the mother or wandering away—discipline is immediately enforced by a warning growl, a direct stare, or even a quick nip. The cubs quickly learn the boundaries of permitted behavior and stay within them. At the same time the mother uses even mock violence very sparingly.

We observed an excellent canine teaching experience in Point Barrow, Alaska, that might be relevant to child rearing. The dominant wolf cub in a family of captive wolves managed to kill a rat by himself. His mother came into the cage, obviously wanting the rat for herself. She sniffed at it, and the cub responded by growling and snapping. Instead of countering with force, however, she was more subtle. She looked at him for a long time, then went to the corner of the cage, dug up a piece of caribou meat, and dangled it before the pup. The pup leaped at the chunk of caribou, and the mother went back to make a meal of the rat. By not resorting to force, she managed to save his "ego" and showed foresight in manipulating her cub. Child psychologists tell us that the use of violence condones violence, and we might do well to apply this maxim to our treatment of young dogs. Furthermore, the wolves teach us that, before any discipline can be used, an emotional bond must be established. Up to the age of about eight weeks nothing but "love therapy" should be applied, establishing bonds of trust; only at about twelve weeks should any discipline be used, and then only to establish the outer limits of behavior.

> Many dogs end up with a quack psychologist because a vet could not deal with a behavioral problem.

We must also recognize the wide temperamental differences among different breeds of dogs. For timid types, such as beagles and toys, a direct stare or gruff word is usually chastisement enough. Overrigid control can totally dampen the spirit of such dogs. More animated and independent breeds, especially terriers, require—and at times seem to demand—a firmer hand and even occasional violence in order to establish dominance. The owner, like the parent wolf, must be "top dog." Overindulgence with either type can result in either social maladjustment very similar to that of a bratty child or overdependence verging on helplessness.

Once truly antisocial behavior is established, it may be impossible to curb. To a certain extent, we might again look to wild canids for useful techniques. A mother wolf will seize an unruly cub by the scruff or muzzle and pin him to the ground, which induces an innate submissive response. Touching a dog in the groin area also calms it, and petting reduces the heart rate. If the dog is beyond responding to normal canine signals, drastic means may be required. While running for the telephone, one owner stepped on his dog and was subsequently bitten each time the phone rang. A trainer put the dog into a kennel and rang random bells in its cage for a solid week. This repeated exposure taught the dog that the sounds were innocuous and desensitized the biting response. A pediatrician, aghast at the number of children being bitten by dogs, evolved a technique to curb biting: When a dog began to attack a child, she would hang it by the neck for two or three minutes until it nearly passed out. She reported that the biters were immediately cured. R. W. Redding of the University of Alabama reports that frontal leucotomy operations reduce aggression in dogs, and others report success with deep barbiturate anesthesia. Such extreme measures would perhaps be unnecessary if man understood more about dog psychology.

Given the complexity of canine behavioral problems, which are only beginning to be understood, the veterinarian will in the future carry a different—and heavier—responsibility than before. As nutritionally balanced dog foods, better vaccines, and more effective deworming techniques reduce the vet's physical chores, he will be freed for this more difficult work. As yet, in the field where they are really needed—the relations between pet and owner—veterinarians are generally incompetent. Few vets have had any child psychology courses during their training, let alone dog psychology. Although they ride the crest of affluence in this country, charging, for example, $30–100 for a five-minute spaying operation or $300 for eye surgery, they are almost indifferent to the far more important psychological health of pets and owner/pet relations. Many dogs unnecessarily end up with a quack dog psychologist because a vet had inadequate knowledge to deal with a behavioral problem. If the vets themselves know little dog psychology, dog owners can hardly be expected to understand the problems of their maladjusted pets.

Finally, dogs are accompanying people in their neuroses not only on a one-to-one basis but also as a population. Although there are no good figures available, it is obvious that there are far too many dogs in this country, many of them running in semiwild packs through cities. However, many people hesitate to sterilize their dogs not only because the price is still outrageous but also because of the close identification between owner and pet. Men and women alike tend to feel as though they are sterilizing themselves when they order such an operation for their dog. However, new techniques could avert many of these personal crises. Experiments indicate that puppies may be injected with a permanently sterilizing hormone. The Humane Society already requires that any female pups it gives away must be sterilized by the adopter when they reach sexual maturity. Typically enough, man and dog seem to be facing this impasse together. A man is reluctant to sterilize either himself or his dog. But, as man and dog have grown steadily closer over the 10,000 years of their companionship, we might safely predict that at least on a technical level this problem will be resolved for both in the near future. □

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

A Diet Guide for Chronic Energy Consumers

TO REDUCE YOUR EXCESSIVE ENERGY CONSUMPTION, INSULATE YOUR HOUSE, ABANDON THAT FROST-FREE REFRIGERATOR, AND TRY WALKING TO WORK.

BY ERIC HIRST AND ROBERT HERENDEEN

Almost daily—in the press, on television, and on radio—we are told that we are facing an "energy crisis." Projected needs for energy appear to be outstripping supplies, and we are warned to expect higher energy prices, fuel shortages, and more electric power brownouts. To put it simply, before long, we're told, there's not going to be enough energy to go around.

What to do? Two solutions are commonly proposed. The first—the traditional approach—is simply to increase the supply. This implies the exploitation of new sources of energy (fusion and solar power come immediately to mind) and, while means to tap these sources are being developed, increasing the number of conventional power plants, strip mines, oil and gas wells, and petroleum refineries.

The second solution—one that springs from the growing concern for the environment—is to decrease the growth rate of energy use or even to reduce energy consumption to below its present level. It is this second proposed solution that concerns us here. Can it be carried out, and if so, how?

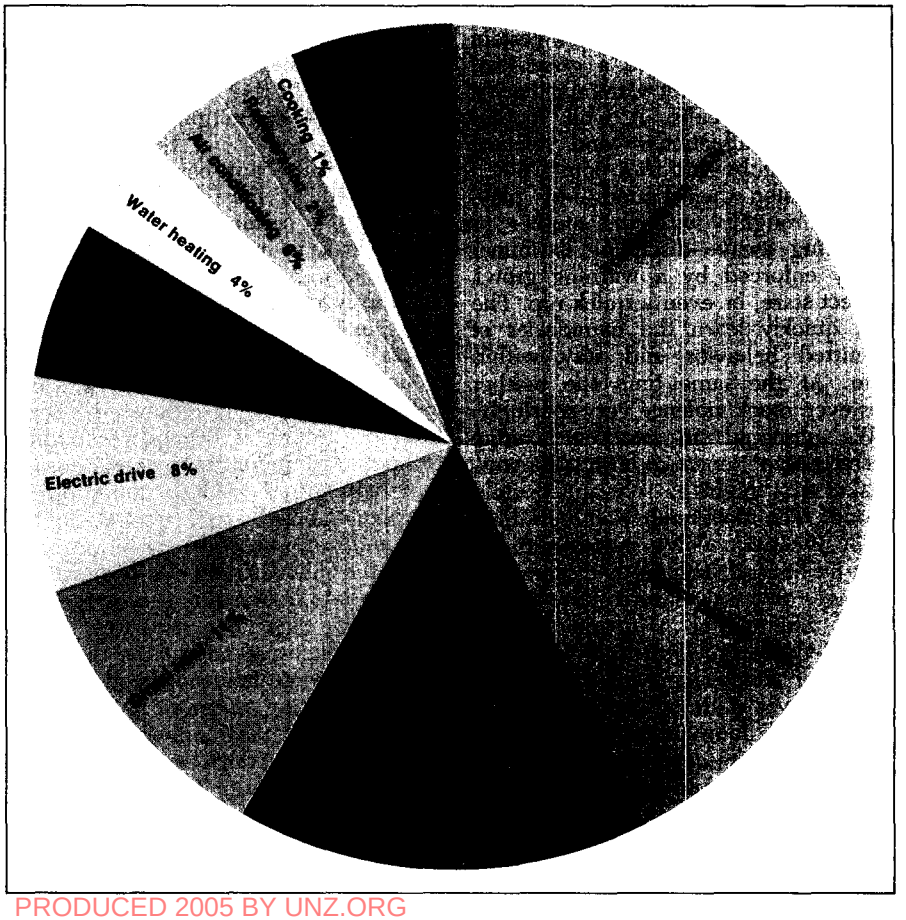
To understand how curbing the nation's energy thirst might be accomplished, we first need to know something about how energy is now being used and how that use is growing. Between 1950 and 1970, for example, total U.S. energy use doubled. During this period our population grew by 34 per cent, and per capita Gross National Product, a dubious but commonly used measure of affluence, increased by 52 per cent. Thus, population growth accounted for roughly 40 per cent of increased energy use during this period, while greater affluence accounted for the remaining 60 per cent.

How is this energy used? Transportation (of people and freight) consumes one-fourth of our energy, primarily as petroleum. Space heating of houses and commercial establishments consumes another 18 per cent. Industrial uses (steam, heat, electric drive, fuels used as raw materials) take an additional 41 per cent. Together these uses account for 84 per cent of the total U.S. energy budget. The remaining 16 per cent includes water heating, air conditioning, cooking, refrigeration, and various other energy uses.

But let us examine transportation more closely, because it accounts for such a large fraction of our total energy consumption. Energy efficiency for intercity passenger traffic is lowest for airplanes, increasing by a factor of six through cars, buses, and trains. For urban traffic human transport (walking, bicycling) is ten to forty times as efficient as is motorized transport. Because more than half of all automobile trips are less than five miles long, there are considerable opportunities for energy savings (and concomitant reductions in air and noise pollution) in a return to human power.

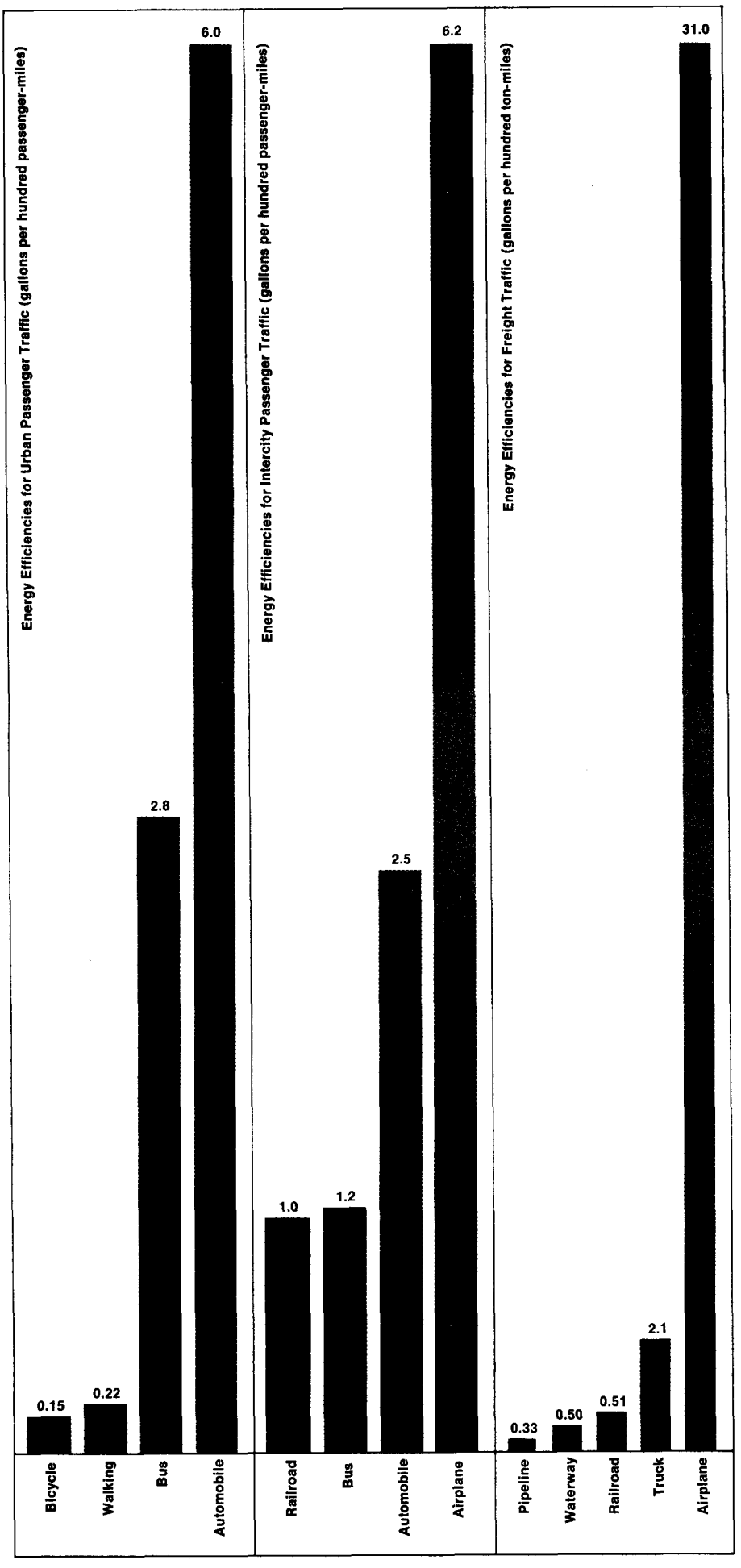
The variation in energy efficiencies for freight-transport modes is even greater than for passenger modes. Shipping freight by air or truck is faster than by rail or boat shipment but much more expensive in terms of fuel con-

End uses of energy in the United States today



Eric Hirst is a researcher at the Oak Ridge National Laboratory in Oak Ridge, Tennessee. Robert Herendeen is a research associate at the Center for Advanced Computation at the University of Illinois in Urbana.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



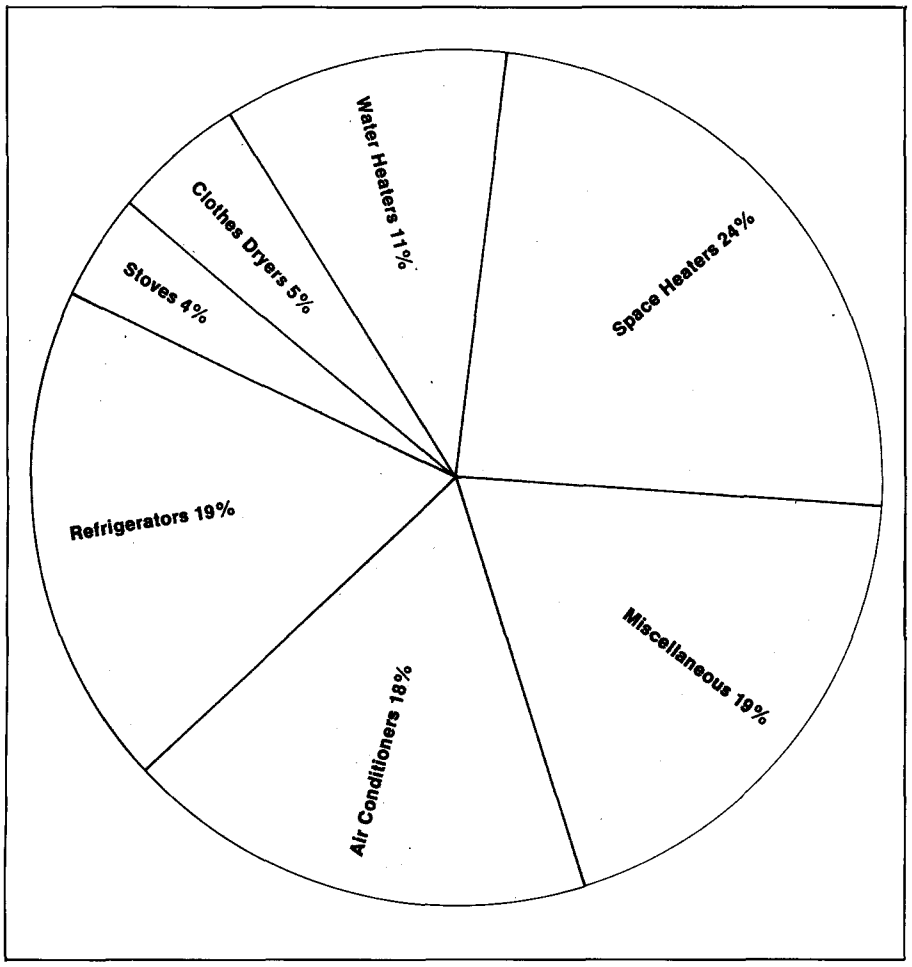
sumption. We estimate that roughly 30 per cent of the energy devoted to transportation could be saved through the use of more energy-efficient transport modes. This potential energy saving represents almost 8 per cent of the U.S. energy budget.

Another spur to energy growth is residential use—homes now directly use 20 per cent of our energy. The major contributor to the growth of residential energy use has been electricity; between 1960 and 1970 consumption of electricity more than doubled. However, the number of wired households increased by only 24 per cent. Thus, the use of electricity per household increased by 84 per cent during this ten-year period. While certain appliances have become more energy intensive (for example, a frost-free refrigerator uses 50 per cent more energy than does a conventional one), the major contributor is increased purchase and use of appliances: affluence.

The increase of home energy use in terms of appliances is as follows: Electric space heaters accounted for 24 per cent, refrigerators for 19 per cent, air conditioners for 18 per cent, and water heaters for 11 per cent. (Such items as electric toothbrushes and carving knives consume trivial quantities of electricity, although they serve an inspirational function for environmentalists.) Almost half the growth in residential electricity use is accounted for by direct heating—that is, space heating, water heating, cooking, and clothes drying. For these four functions natural gas is two to three times as efficient as electricity in terms of total energy consumed.

Other significant energy savings in the home can be obtained through improved efficiency of use. For example, space heating of homes in the United States accounts for more than 10 per cent of the nation's energy budget. A home with enough insulation to meet the homeowner's economic optimum point requires 40 per cent less energy for space heating than does one meeting the 1970 Federal Housing Admin-

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Contributions to growth of residential electricity use between 1960 and 1970

istration standards. If all homes in the United States had this optimum level of insulation, our total energy need would decrease by almost 5 per cent and homeowners would save money over the lifetimes of their homes.

Similarly, the energy efficiency of room air conditioners could be easily improved. The average unit on the market today is only half as efficient as the most energy-efficient models. Greater use of efficient air conditioners, plus application of increased building insulation, could have eliminated the need for over seven thousand megawatts of power in 1970, the equivalent of the total energy of three Four Corners power plants.

Industry uses more than 40 per cent of the U.S. energy budget to produce goods for our consumption. The manufacture of a few basic materials in the United States accounts for a large fraction of the industrial consumption of energy; specifically, the production of primary metals (especially steel and aluminum), chemicals, and paper account for one-third of the total industrial energy use. Increased recycling of these materials would reduce energy consumption, as well as conserve natural resources and alleviate solid waste problems.

The commercial sector (stores, offices, hotels, etc.) offers additional possibilities for energy conservation because it accounts for about 15 per cent of total energy consumption. More than half the energy used by commercial establishments is devoted to space heating and air conditioning. It is likely that additional building insulation and the use of more efficient air conditioners would save energy here. In addition, the commercial sector accounts for about 40 per cent of the nation's electric lighting load. Several architects claim that currently recommended lighting levels can be reduced without danger to eyesight or worker performance. This would also save energy.

We have mentioned certain improvements in energy use that could slow energy-demand growth. But we must be explicit about how far this can take us:

1. Certain practices and processes can be made more efficient with no change in our living standard. Most of these changes will require institutional action such as uniform labeling requirements, increased availability of mass transit, increased recycling, and minimum energy-performance standards for building design and energy-consuming devices. In addition, personal action will be required to ensure that these institutional changes are effective. We estimate that such technological improvements could cut present energy consumption by roughly one-third. These changes, however, require the production of new goods and services rather than a retrofit of existing systems. Thus, at least a decade or two will be required before such changes can have a major impact on energy consumption.

2. Unfortunately, efficiency improvements alone may not constitute an adequate long-term response to energy problems. If we could institute today all the changes mentioned here, tomorrow the United States would use two-thirds as much energy as it did yesterday, with an energy growth rate equal to two-thirds of the historical 3.5 per cent a year. But in eighteen years energy consumption would be at yesterday's level and growing at 2.3 per cent a year (a doubling time of 30 years).

3. If it becomes desirable and necessary to further reduce energy growth rates beyond that which can be achieved by increasing efficiency of use, we will have to slow the growth in our material standard of living and/or slow population growth rates. For example, trains can be as convenient and as fast as more energy-intensive alternatives for short trips. But we see no way to get from Seattle to Denver in two hours by train. Therefore, we may have to lower our expectations for using more and more rapid transport each year if we wish to further reduce energy growth rates. Moreover, our hopes for amassing more material wealth would also have to be tempered. For example, we could no longer expect to replace a conventional refrigerator with a larger, frost-free model complete with icemaker. Nor could we add more air conditioning in our homes. This would mean slowing the growth of consumption—in short, reducing total economic growth rates.

Energy serves a fundamental role in society, increasing personal comfort at home, expediting transportation, and increasing labor productivity in industry. Unfortunately, the environmental consequences of future energy production and use may ultimately negate the benefits of energy. Resolving energy/environment conflicts will involve several strategies: 1) developing new energy sources and conversion technologies; 2) developing improved pollution control techniques; and 3) slowing energy-consumption growth rates. The time scale to achieve reductions in the energy growth rate is probably at least a decade or two. In any case we can definitely count on some more power plants, strip mines, oil and gas wells, and petroleum refineries in the years to come. □

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SCIENCE ISSUES (Such as They Are) AND THE ELECTION

BY DANIEL S. GREENBERG

Choose your prophet, and science and technology loom as either the salvation or the ruination of values that are widely held dear. But, whatever the choice, the subject rarely intrudes on presidential politics, which might seem curious since, as the recipients of a federal research and development budget now totaling $17 billion, science and technology are wards of the U.S. Treasury. Though most of the money is routed roundabout through grants and contracts to universities and industry, there is perhaps no professional segment of American society, short of the armed services, more dependent upon Washington for its payroll. And, if the hand wringers of pro- and antiscience are correct, we are all the targets of these specialists. Why, then, the near absence of contention over science and technology in both past and current presidential campaigns?

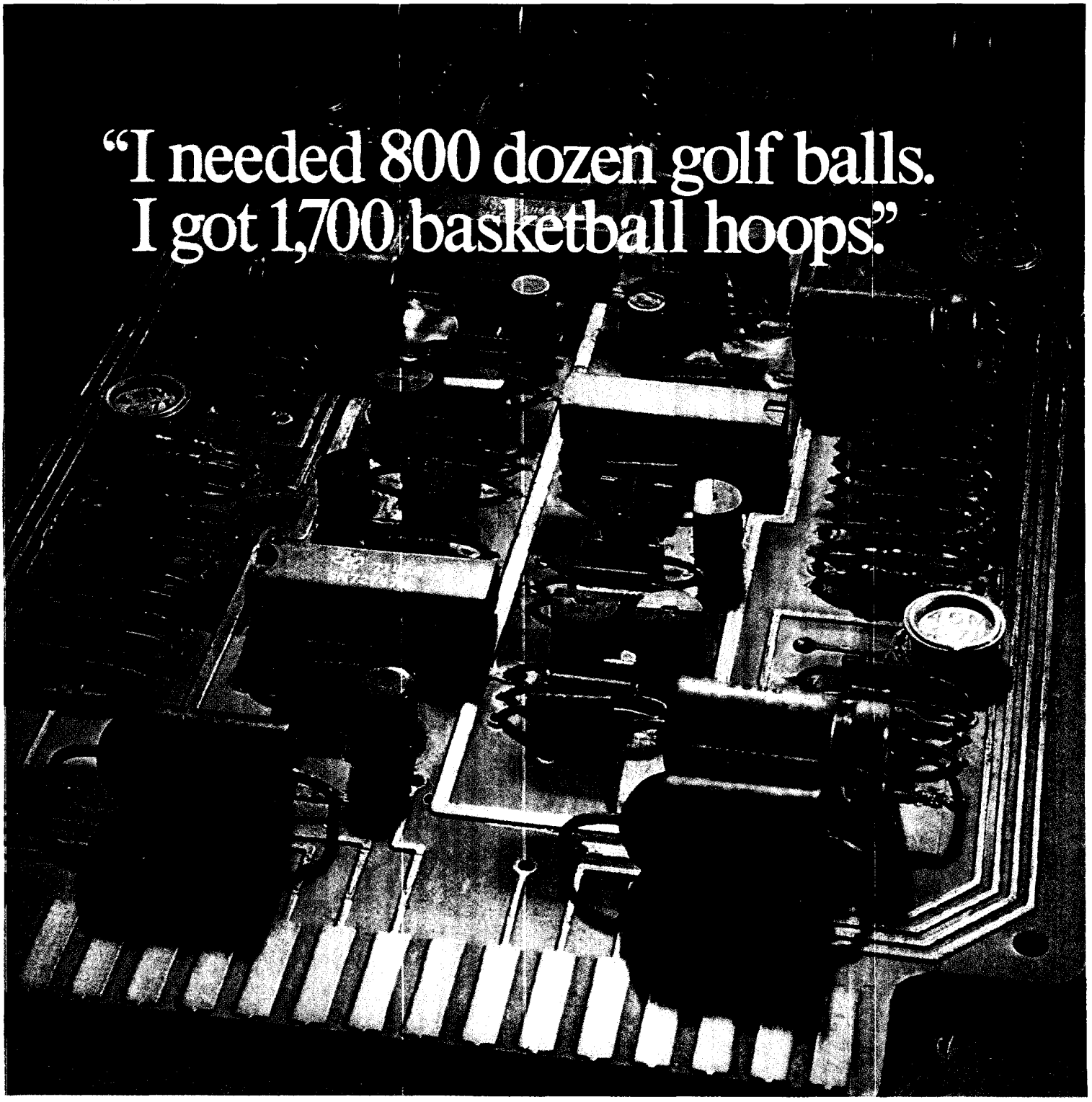
Starting at the basic research end of the spectrum, which annually receives some $2.6 billion in federal funds, the answer is that the candidates are indistinguishable and therefore silent because, to the extent they have thought about it, they differ little at all. A high-technology society, whether pointed toward Nixonian or McGovernite visions of America's role at home and abroad, requires that basic research shall thrive—though science and government may squabble, as they have in recent years, over how much is enough. The reason it must thrive, of course, is that it produces ideas and techniques that are eventually transformed into tangible products, from rockets to electronic pocket calculators. It also, through academic research departments (where most basic research is situated), provides a good deal of the training for the technologists who devise these products. Since the costs of basic research are large and industry can't or won't foot more than a small portion of the bill and private philanthropy is no longer adequate or much interested, the bills go to the federal government. (And let there be no illusions about the government's paying the costs out of respect for science's cultural value. In a corporate economy, with major military commitments and increasing international competition for high-technology products, basic research is valued for its pay-off—uncertain though that may be—rather than for its alleged beauty.)

As for contentions that this or that candidate would do more for the practitioners of basic science, the truth is that they are too few in number and too widely scattered to merit electoral wooing. What they want in the lab is money and independence, matters on which neither candidate can be considered superior. Early in his administration Nixon bruised scientific sensibilities by vetoing at the last minute the appointments of several scientists who had crossed his policies on the war and arms control. But he since has learned what all national leaders learn in dealing with basic science: Support it and leave it alone, and it tends to be productive and more or less to mind its own business.

Moving along from the esoterics of basic science to applied research and big development projects, which together account for nearly $15 billion in

Daniel S. Greenberg is Washington editor of SR/Science.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



Life is full of little misunderstandings. But we make some unusual phones to help eliminate a lot of them. They're called Data-Phone® data sets. And they let computers talk to each other over regular telephone lines.

To make this very special phone takes some pretty special people. Skilled technicians and engineers. Specially trained men and women who build and test these complex phones.

We're Western Electric — at the heart of the Bell System. We make things that bring people closer. We also make Data-Phone data sets. Just so one machine can talk to another machine.

Western Electric

We make things that bring people closer.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

federal spending, the candidates display major rhetorical differences: Nixon for the SST and space shuttle, McGovern against; McGovern for a Kennedy-initiated bill that would eventually put domestic research spending on a par with military research, Nixon personally silent so far but obviously opposed. It is in such areas that real differences could manifest themselves. But the historical record shows that, give or take a few billions and a few projects, and taking into account the accidents of political placement that often affect congressional affairs one way or the other, the will of the White House rarely has a swift effect on the immense network of institutions, alliances, and interests involved in the production of science and technology in the United States. The exceptions are those rare thunderbolt events associated with national survival or prestige, such as the atom bomb project in World War II or the moon-landing commitment evoked by Soviet space prowess. But, normally, research and development defy swift changes of pace or direction and display a continuity that has little to do with ideological charters of the moment. In fact, a disturbing element is their general unresponsiveness to changing social and political priorities. Harold Wilson, for example, became Prime Minister on the strength of his pledge for a "white hot technological revolution" that would bring prosperity to Great Britain. His inventive Minister of Technology, Anthony Wedgwood Benn, reorganized and subsidized British technology with ferocity—and nothing much happened.

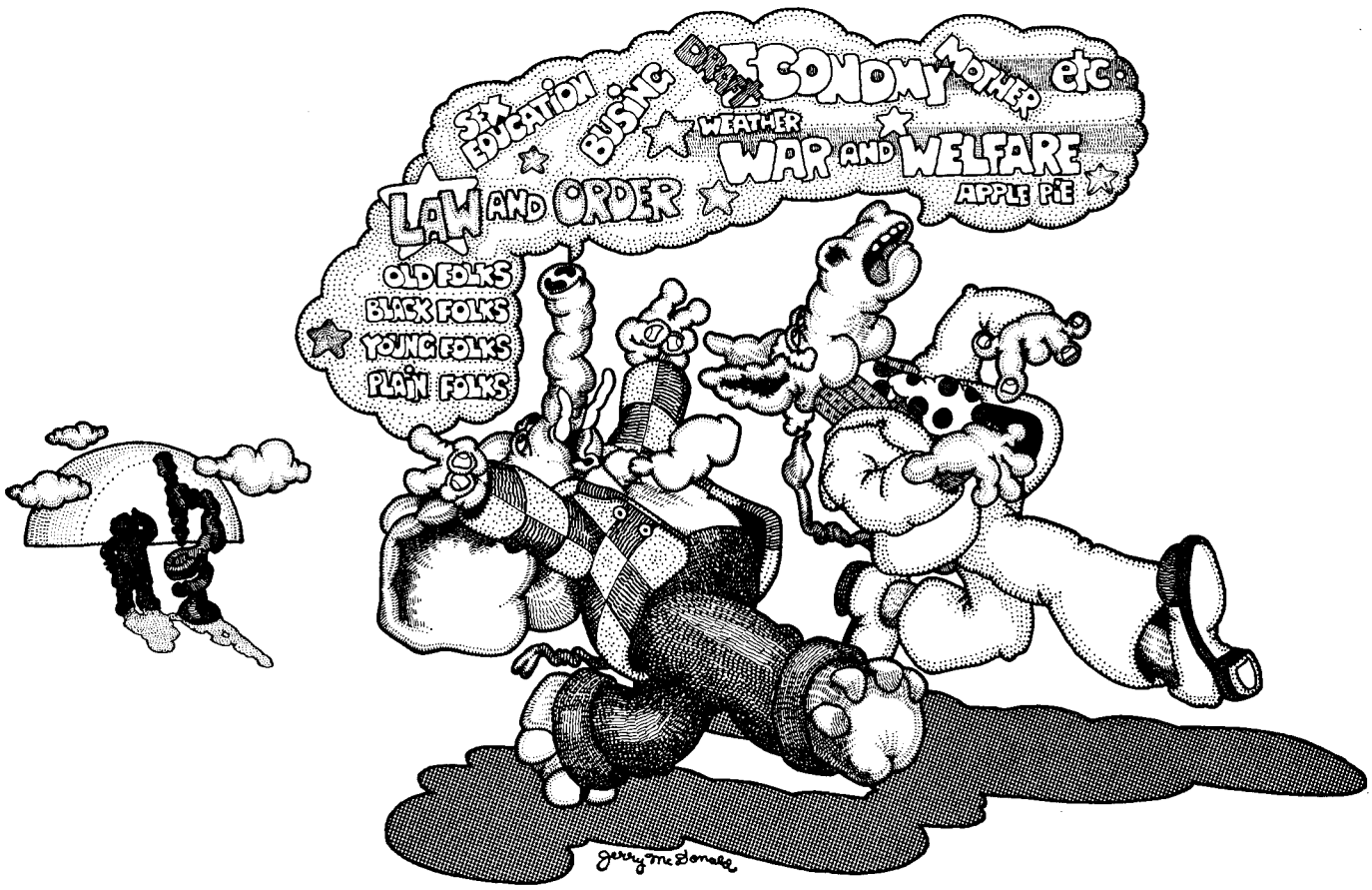
Early in the Kennedy administration Herbert Holloman, assistant secretary of commerce for science and technology, proposed that the federal government seek to invigorate "civilian" science and technology just as it had the military field. The proposal was defeated, largely because of industrial opposition. Nixon picked up the same theme last year, when he ordered an immense study, involving hundreds of specialists from within and beyond the government, to identify "technological opportunities" that might boost industrial productivity and help solve an assortment of domestic problems. The conclusion was that little is understood of the process that leads from invention to a salable product, and the biggest innovation to emerge was a $40-million fund to help finance "experiments" on various aspects of the innovative process.

If you take him at his word, McGovern would cut national security research and increase civilian research, but, since there is no dearth of scientific and technical activity in the United States today, it should not be assumed that more spending on research would necessarily lead to more bright ideas.

The political meat of the Kennedy-McGovern legislation is its provision for retraining scientists and engineers displaced by defense cutbacks and virtually guaranteeing them employment. Spokesmen for scientific and technical organizations naturally regard this as a congenial proposition, without any apparent thought about the backlash that might justifiably ensue from what is essentially another step in the American process of creating socialism for the upper and middle classes and free enterprise for the poor.

To the minuscule extent that they have concerned themselves with issues of science and technology, the candidates are essentially parroting the formulations of "experts" who are kept on hand or summoned to look after such specialized matters. But in both camps the experts are cut from the same institutional and professional cloth. As Theodore Roszak points out in his brilliant new book, *Where the Wasteland Ends*, "There may well be hot debate among them about options and priorities and, quite sincerely, about the 'public good.' It is simply that their debate does not reach very deep, nor is it heard far off. Their disagreements do not extend to advocating major reallocations of social power, nor do they challenge the cultural context of politics."

This is true, which means that the voter who wishes to include the candidates' attitudes toward science and technology into his electoral calculations might as well forget about it and judge them on issues where real differences exist. □



PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Louis S. B. Leakey, 1903-1972

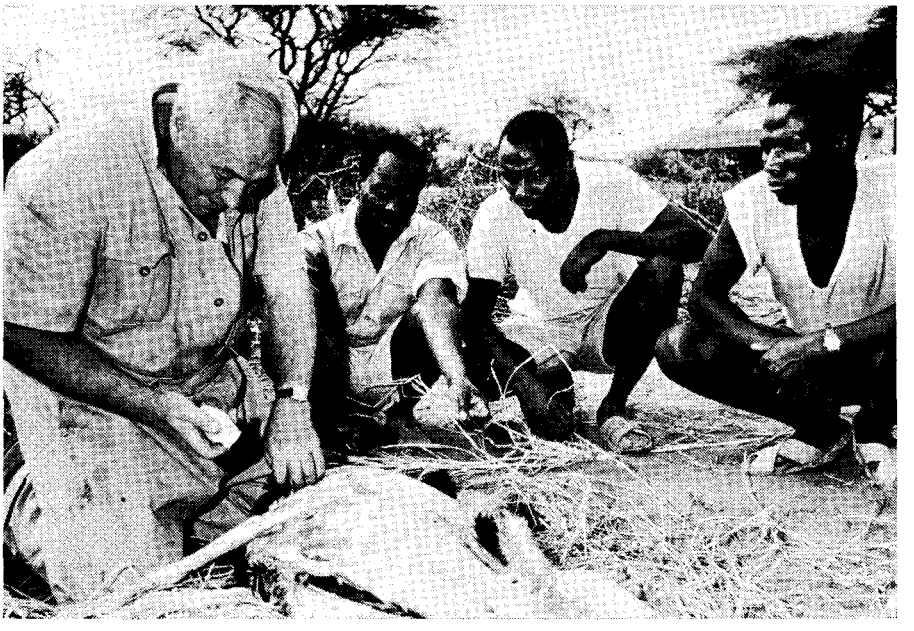
BY HARRY L. SHAPIRO

In the annals of the search for and discovery of the fossilized record of man's evolution, there is no better known name than Louis Leakey. For more than forty years he devoted his life and energies to the exploration of the Olduvai Gorge and the surrounding area in East Africa where he made his remarkable finds. It was here that he uncovered the remains of *Zinjanthropus*, *Homo habilis*, Chellean man, Kanam man, and numerous other fossils, human and animal, that have enormously expanded our knowledge of the stages of human evolution and the ecological world in which they developed.

This kind of deliberate and intensive search for the records of our biological ancestry is a fairly recent development. The earliest recognized human fossils —Gibraltar and Neanderthal—were found by chance, and at first neither was recognized for what it was. The intellectual and scientific framework for the appreciation of such discoveries did not then exist. It was only after the publication of Darwin's *The Origin of Species* in 1859 that scientists began to appreciate the true significance of these initial discoveries. The corpus of fossil evidence has grown enormously since then and has enabled us to define with increasing precision the course of human evolution. The fossil record now contains hundreds of relics covering four to five million years and embracing a sequence from *Australopithecus* —still bearing traces of his prehominid origins—to *Homo sapiens* himself.

As time went on and the excitement of the chase increased, more and more scholars devoted themselves to the active search for "new" fossils. One of the first of these was Eugene Dubois, who joined the medical service in Java because he was convinced that this was a fertile area for new discoveries. He was rewarded by finding the remains of *Pithecanthropus erectus*, which in 1894 was the most primitive hominid then known. J. S. Andersson and Davidson Black traveled to China for the same reason and uncovered Peking man. Other successful searchers were Ralph von Konigswald and Robert Broom, the latter famous for his discoveries in South Africa. But none pursued the traces of fossil man with greater dedication and success than did Louis S. B. Leakey.

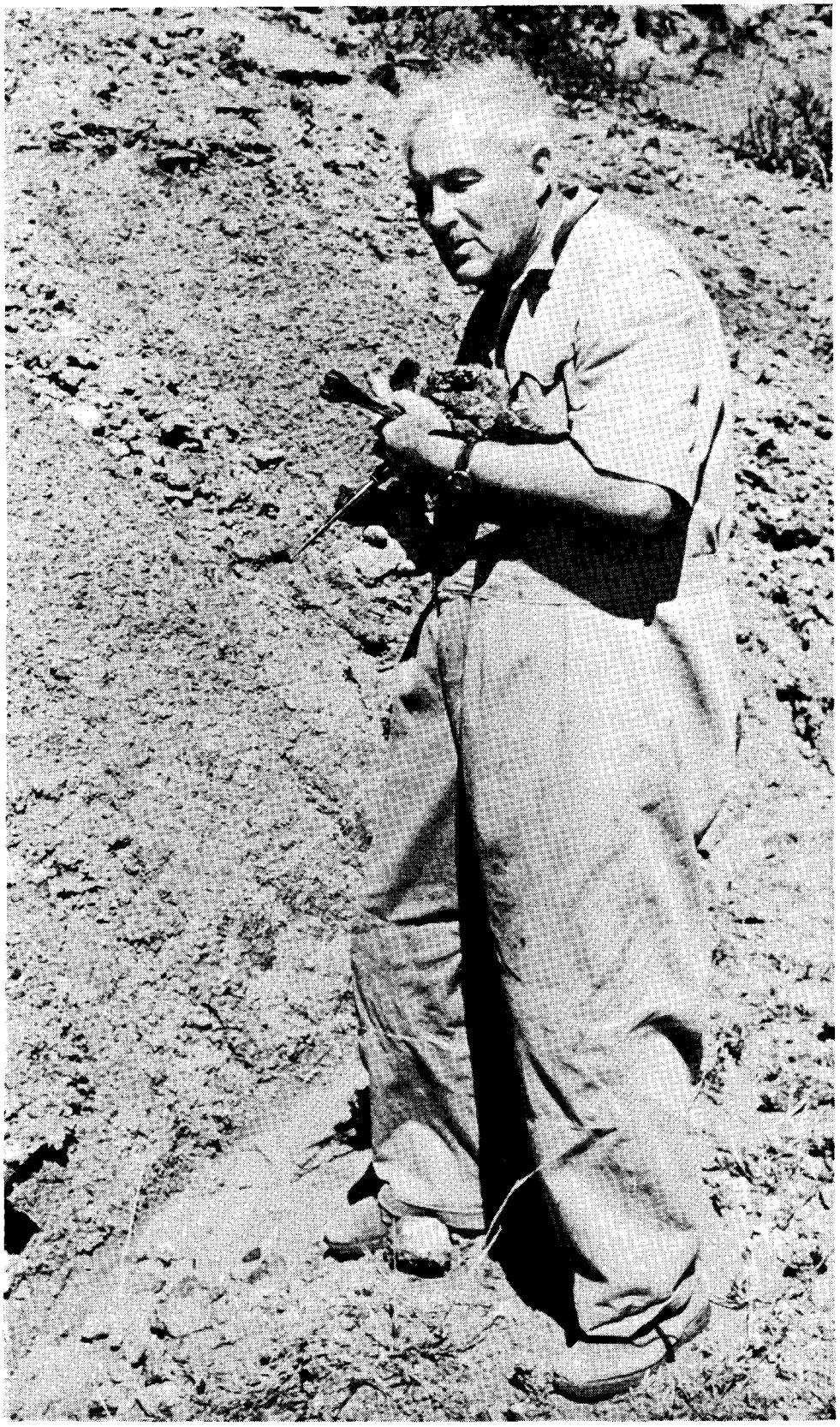
His worldwide reputation as a student of human evolution with an almost miraculous instinct for unearthing fossils is, of course, partly due to the heightened popular interest in such discoveries and to the coverage these events now receive in the press. But Leakey's career, both widely known to



Louis and Mary Leakey, carefully sifting for clues to man's past, are protected from Tanzania's hot sun by an umbrella. At bottom, Dr. Leakey demonstrates the use of a stone implement to his staff. He used a stone chopper of his own making to skin and dismember a ram in less than twenty minutes. Photo on right shows Dr. Leakey at a cut in the Olduvai Gorge, Tanzania.

Harry L. Shapiro is chairman emeritus of the Department of Anthropology, American Museum of Natural History, New York, and professor of anthropology at Columbia University.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



the public and appreciated by experts, remains outstanding.

Born in Kenya in 1903 of British parents, he spent much of his childhood living with Kikuyu tribesmen and absorbed a vast and detailed knowledge of their traditional culture and language. He recorded much of this background in his memoirs, which have not yet been published but which should be of great value to scholars of African cultures and society.

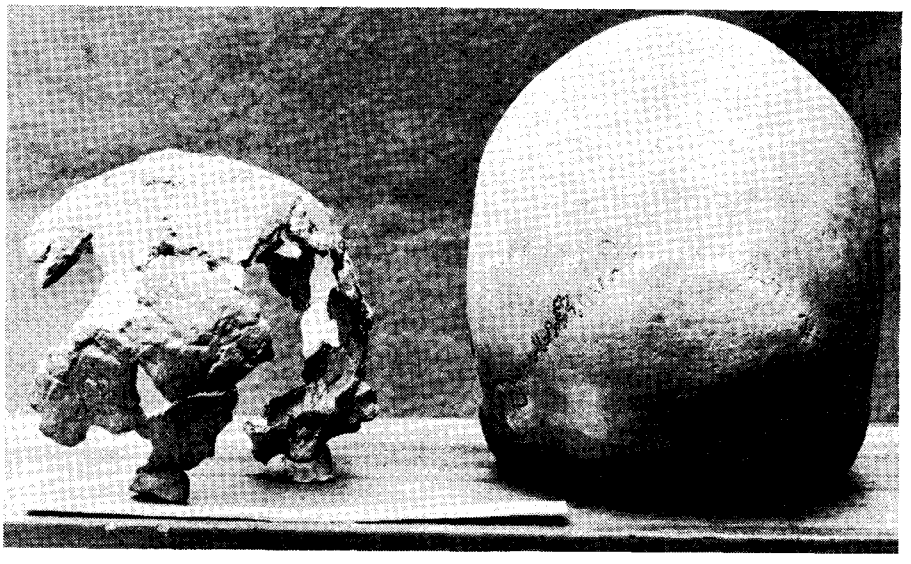
In 1919 he was sent to school in England and later attended Cambridge, where he became attracted to the field of anthropology. Considering his early environment, this was a natural development, and very early his interest was drawn to the unraveling of the prehistoric cultural development of East Africa, particularly of Kenya. One of his first major works was *The Stone Age Cultures of Kenya Colony*, published in 1931. The excavations that provided the basis for this study had been initiated in 1926, when Leakey was fresh from his studies at Cambridge, and they had two important consequences for his subsequent career. They gave him an intimate familiarity with the Olduvai Gorge and its potentiality as a source of significant discoveries pertaining to Africa's prehistory, and they yielded a number of human fossils that opened exciting vistas of the human past.

The Olduvai Gorge in Tanzania is a part of the Great Rift Valley, which runs almost the entire length of East Africa and continues into Israel. The rift is a vast crack in the earth's surface, and one side of the cleft exposes in almost textbook fashion the successive layers of the Pleistocene, that period during which much of human evolution occurred. Fossils and artifacts found in the superimposed strata can be neatly dated by position, and, with the recently developed potassium-argon technique, the dates suggested by the layering can be verified absolutely.

The discovery of apparently early forms of *Homo sapiens* encouraged Leakey to persist in his exploration of this geological gold mine. This search ultimately lasted his lifetime and became a family enterprise, for he was joined by his wife, Mary, and their three sons.

After a long stretch of relatively futile searching as far as human fossils were concerned, the reward came in

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



At top, Philip Leakey watches his parents work. Dr. Leakey spent most of his adult life on his hands and knees, and for him "digging" meant the careful use of camel's-hair brush and dental pick. One of his finds, pictured at left in the bottom photograph, is the skull of a young woman (Homo habilis) *who lived nearly two million years ago. Although small when compared with the present-day African skull shown on the right, the brain casing was shaped like that of modern man.*

1959, when the first fragments of *Zinjanthropus* were discovered extruding from one of the layers of the rift. Only a trained eye could have spotted them. At first Leakey announced the discovery as representing a new and distinct form of early hominid. This view has since been altered, and *Zinjanthropus* is generally regarded as an *Australopithecine* related to those found in South Africa by Raymond Dart and Robert Broom.

But the date Leakey was able to assign to *Zinjanthropus*—1.75 million years ago—almost doubled the previous estimates of the antiquity of those early hominids. Recent excavations by Clark Howell and others have extended the dating of this hominid as far back as four to five million years.

Subsequently *Homo habilis* was discovered along with primitive stone tools. Leakey described this new fossil type as more advanced in its evolutionary progress than *Zinjanthropus*, although the dating of this specimen was only slightly younger. More intensive study of *Homo habilis* throws considerable doubt on the distinctive character assigned to it by Leakey. The association of this fossil hominid with stone tools, however, remains a critical landmark in our understanding of the emergence of technology and its probable influence on human evolution.

Although his enthusiasm led him to premature conclusions on occasion, Leakey was generally prepared to modify his views on the significance of his finds when subsequent detailed studies warranted. In the case of *Zinjanthropus* and *Homo habilis* this was clearly apparent. But there can be little doubt that his crucial discoveries have enormously affected our views of early man and have proven that man's descent took longer than we had originally believed.

The finds that Leakey reported have also served to substantiate the view that man evolved in Africa, although Asia had previously been the favored site. Leakey himself argued for this conclusion, and he recently advanced the claim that *Kenyapithecus*, a Miocene fossil found in Kenya, was actually an emergent hominid. If Leakey is right, this fossil, once considered to be apelike, would represent the earliest ancestor of man and would place human evolution even farther back on the geological time scale than any of the existing dates suggest.

No one took greater pleasure than Leakey in the controversies stimulated by his remarkable discoveries. He lectured widely for lay audiences, which he charmed by his exciting exposition of his views. He was equally lucid with professional audiences and was able to counter opposing views with skill and tact. At the time of his death in London on October 1, he was preparing for a lecture tour of the United States. His writings, although respectable in output, were not voluminous. He was the field man par excellence, and he has left a heritage to keep the rest of us busy for a long time. □

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Where does brain power come from?

The editors of Saturday Review proudly announce a magazine devoted to Education.

All through your life, environmental influences are having a profound influence on your ability to think and cope.

Formal education plays an important part in this process, but clearly, all of the answers cannot be found in the classroom.

So any inquiry into learning patterns must go beyond the classroom.

In addition, basic education is undergoing significant change at all levels.

The information explosion is partly responsible.

New technology plays its part. And educators are learning more about how people learn, and what they retain.

But the major change occurring in education today may be due to the fact that teaching methods which worked in America during the industrial revolution and the immigrant waves will not be relevant in the 21st Century.

Today, we are faced with education in the urban ghetto.

Retraining of workers who have been automated out of jobs. Overcrowded, underfinanced school systems. Continuing education beyond college, for people who need it, and for people who enjoy it.

Saturday Review has always had a strong franchise in the area of education. And now the subject has grown so rapidly, it's time we devoted a magazine to it.

So we've created a new monthly: Saturday Review-Education.

It explores the world of learning, and raises fundamental questions about the existing educational system, and the new directions education might take.

It has several editorial departments: Previews and Reviews, Life and Learning, Early Childhood, The Schools, Colleges and Universities, and People and Ideas.

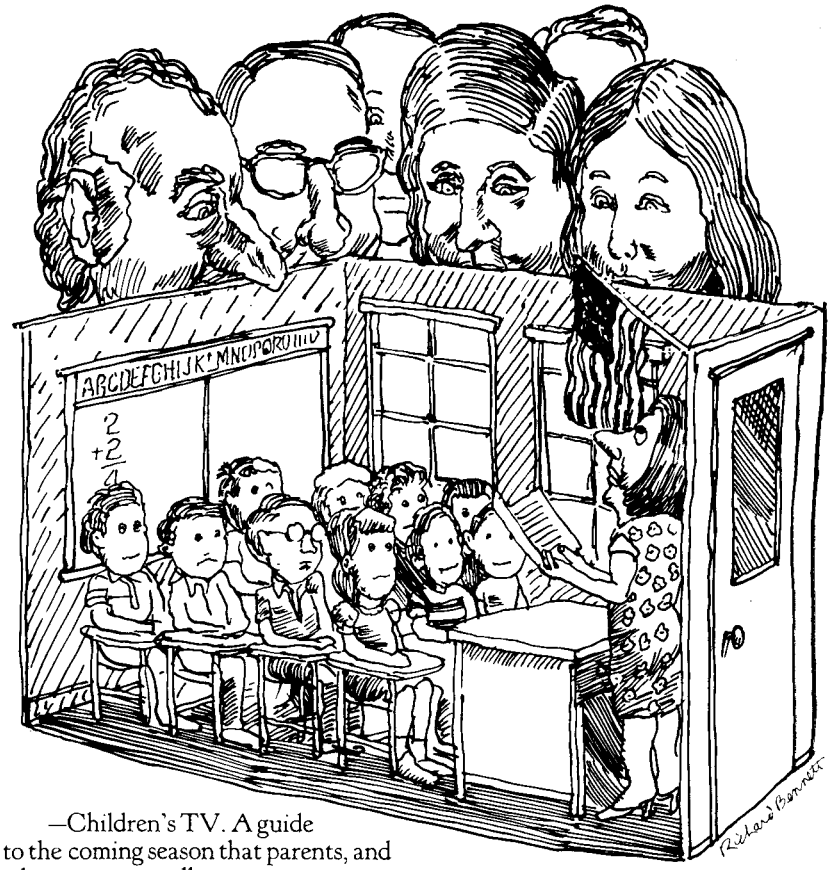
It examines how we learn, where we learn, and what we learn, and relates it to the new requirements of our society.

It does not restrict its attention to schools, colleges and other formal institutions, because we are constantly learning outside the classroom.

It is intensely readable, and exciting.

Here are some of the things you will read about in Education:

—Are "educational toys" really educational? Are they really necessary?



—Children's TV. A guide to the coming season that parents, and educators can really trust.

—The "blue-collar" colleges: as open admissions becomes policy in many colleges, what experience from the past will be significant?

—Do those "crash courses" for the College Boards really help?

—A head-start on Head Start: education begins in the home.

—Should schooling be compulsory? Direct reports from states where it is not.

—The school where 10-year-olds learn to master computers.

In addition, Education will carry features, puzzles, reviews, and editorials, of the kind that have made Saturday Review the brain-prodder it is.

We invite you to become a Charter Subscriber to Saturday Review-Education at the half-price introductory Charter Rate of $6 for 1 year (regularly $12).

It will increase your brain power.

Saturday Review
EDUCATION

Saturday Review
Box 2043, Rock Island, Ill. 61207

Dear Saturday Review,

Enter my introductory subscription to Saturday Review-Education at the Half-Price Charter Subscription rate of $6.00 for one year (regularly $12) with a guarantee that I must enjoy it or you'll give me a full refund.

☐Payment Enclosed ☐Bill me (Offer good only in U.S. and Canada.)

Name _____

Address _____

City _____ State _____

Zip _____ BEB2KDRO

If you are currently a subscriber to Saturday Review, SR-Education is already included in your subscription as part of SR's new total information program covering The Arts, Science, The Society, as well as Education.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Will the Future Be Shaped by Rational Policies?

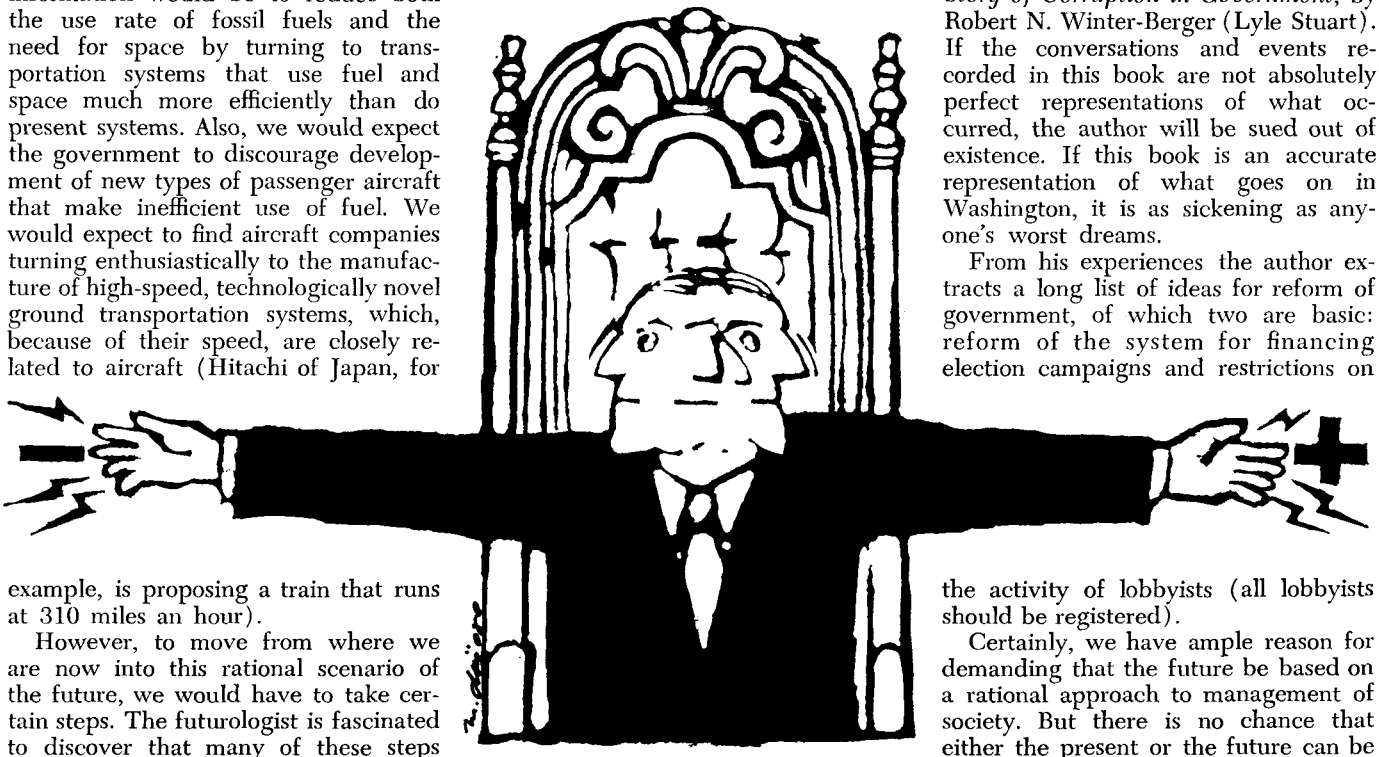
BY KENNETH E. F. WATT

Anyone who has spent several years working on computer-simulation models of society will by now have developed some clear notions about the form the future would take if it were shaped by rational policies. For example, one would expect future policies to be influenced by the knowledge that we are rapidly running out of fossil fuels and many minerals, are polluting the air, and are exhausting available space near our cities. The rational response to this information would be to reduce both the use rate of fossil fuels and the need for space by turning to transportation systems that use fuel and space much more efficiently than do present systems. Also, we would expect the government to discourage development of new types of passenger aircraft that make inefficient use of fuel. We would expect to find aircraft companies turning enthusiastically to the manufacture of high-speed, technologically novel ground transportation systems, which, because of their speed, are closely related to aircraft (Hitachi of Japan, for example, is proposing a train that runs at 310 miles an hour).

However, to move from where we are now into this rational scenario of the future, we would have to take certain steps. The futurologist is fascinated to discover that many of these steps are not being taken, but that, contrariwise, we are stepping backward. There is still massive support at all levels of government for the freeway-automobile transportation system, support for construction of mass transit systems is scarcely above a token level when we survey the whole national scene, and the highest levels of government and the aerospace industry have shown baffling persistence in promoting supersonic transport, which would retail for at least $80 million a copy and make absurdly inefficient use of fuel.

It is scarcely possible to imagine a rational future when the present has such wildly irrational features and institutions are so blatantly incapable of dealing with present problems, which are much simpler than those we will face thirty years from now. Why, the futurologist asks himself, are institutions so irrational?

Two sets of answers are provided in two absolutely fascinating new books. The first, by James D. Barber, is *Presidential Character: Predicting Performance in the White House* (Prentice-Hall). This book theorizes that the responses of a decision maker, such as the President, are determined by which of four personality classes he falls into: passive-negative, passive-positive, active-negative, and active-positive. The ideal decision maker is active-positive: He probes the world around him swiftly and constantly adjusts his responses to new data. The active-negative, on the other hand, has an alarming tendency to adhere rigidly to a defective policy, even when a growing pile of evidence shows that the policy is incorrect.



This book provokes some extremely disturbing speculations that the author may not have intended. What if the recruitment and promotion policies of certain types of organizations systematically move active-negatives upward in the organization? Could it be that the "company man" who doesn't "rock the boat" is really an active-negative in disguise, a "company man" precisely because of thinly veiled rigidity and an optimistic (i.e., minimal) response to disquieting new data? (Example: The world jet market is becoming saturated; we ought to switch to planelike trains.) Perhaps the reason for the irrational appearance of many large organizations at the macro level is that so many active-negative decisions are being made at the micro level.

An equally disturbing book is *The Washington Pay-off: A Lobbyist's Own Story of Corruption in Government*, by Robert N. Winter-Berger (Lyle Stuart). If the conversations and events recorded in this book are not absolutely perfect representations of what occurred, the author will be sued out of existence. If this book is an accurate representation of what goes on in Washington, it is as sickening as anyone's worst dreams.

From his experiences the author extracts a long list of ideas for reform of government, of which two are basic: reform of the system for financing election campaigns and restrictions on the activity of lobbyists (all lobbyists should be registered).

Certainly, we have ample reason for demanding that the future be based on a rational approach to management of society. But there is no chance that either the present or the future can be salubrious unless certain steps are taken to improve our institutions. These two books provide two sets of suggestions. We must ensure that the men who attain senior decision-making responsibility in government are active-positives, who learn rapidly from earlier errors and experiments in policy making. And we must eliminate the possibility of corruption and graft in government by making it possible for a capable man to be elected to the highest offices, free of debts to campaign contributors or anyone else.

The penalties for not attending to these matters will be harsh indeed: depleted resources, higher death rates from pollution, deteriorated climate, congestion and insufferable delays in traffic, and a generally lower quality of life. □

Kenneth Watt is a systems ecologist at the University of California, Davis.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

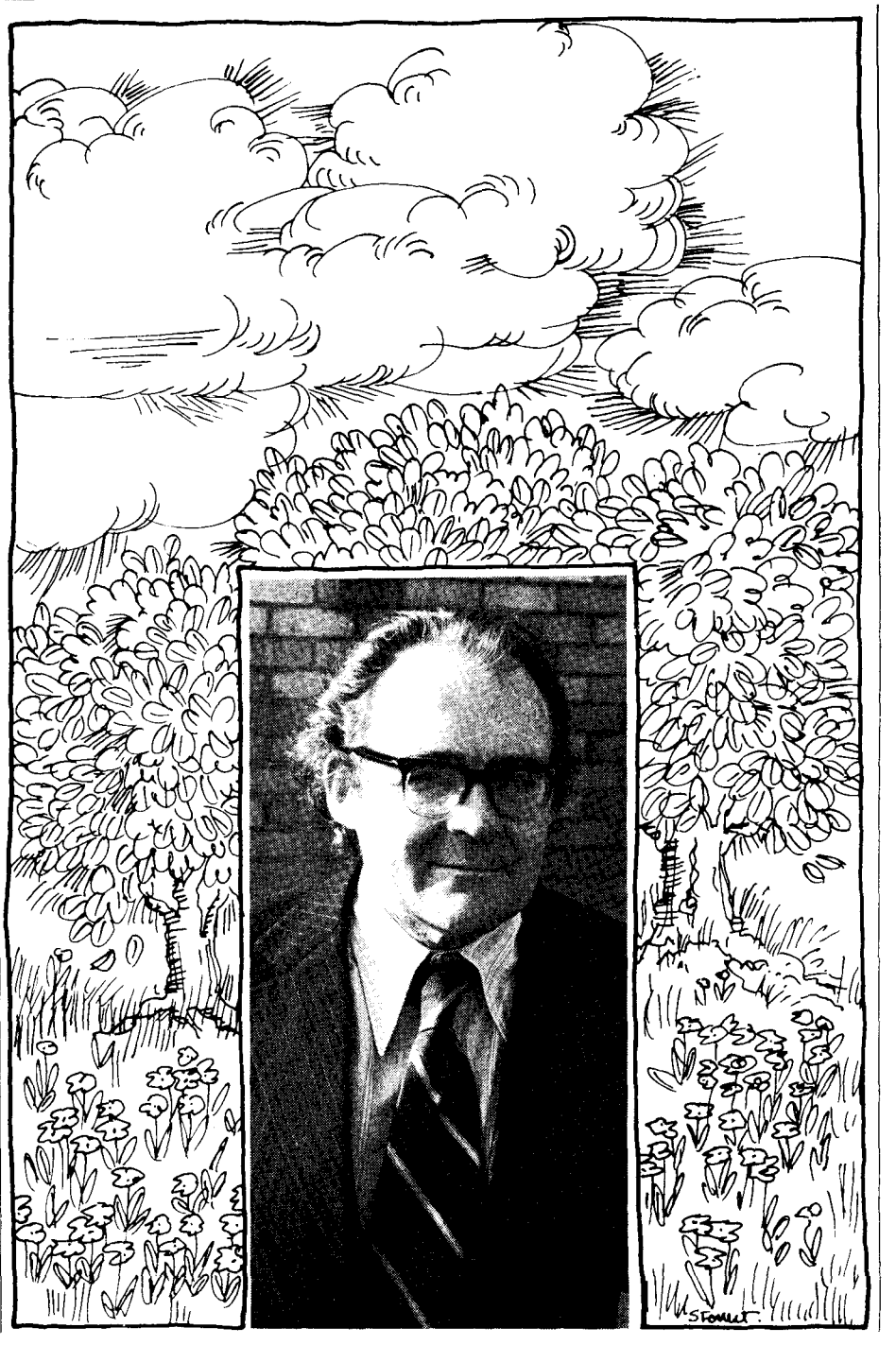
Attacking Ecological Overkill

BY BENJAMIN DeMOTT

THE DOOMSDAY SYNDROME. By John Maddox. 288 pages. McGraw-Hill. $6.95.

At once a critique of ecological extremism, a defense of technology and economic growth, and an unfashionable endorsement of the resources of mind, *The Doomsday Syndrome* is sure to provoke fire fights down a dozen contemporary intellectual lanes. The author, an editor of *Nature* magazine and one of England's leading scientists, holds that the present ecology boom has created a new set of questions, chief among them whether "the energies of the human race should be spent on problems . . . which, however difficult, can be solved [e.g., race, poverty, disease, and freedom in Calcutta] or whether they should be spent on the avoidance of more distant trouble." In his view there's a real danger that "too much preoccupation with the threat of distant calamity [will] divert attention from good works that might be done" and sap our will to act for the preservation of human culture.

Indeed, it has already begun to do so, owing to extravagances in the books and speeches of prophets of ecological doom. Paul Ehrlich writing that in the 1970s "hundreds of millions of people are going to starve to death in spite of any crash programs embarked on now," Barry Commoner writing that "in our unwitting march toward ecological suicide we have run out of options," Rachel Carson frightening the populace



Benjamin DeMott is a novelist and social critic. His latest book, a collection of essays, is Surviving the Seventies.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

with threats of undetectable "cumulative poisoning" by chemicals, Jacques Ellul arguing that "in the modern world the most dangerous form of determinism is the technological phenomenon," René Dubos predicting that "there will be no place for sensitive literature, intensely personal art, or unorthodx science in the human anthill of the future," Garret Hardin contending that "the improved grains have unfortunately given another excuse to those who would criminally deny the truth that we cannot solve population problems by technological means"—these and countless other authorities aren't (in John Maddox's opinion) merely spreading an alarm; they are spreading a sense of helplessness, hopelessness, defeat.

And they are wrong to do so, at least as Maddox reads the evidence. In pressing this point, *The Doomsday Syndrome* focuses both on predictions of disaster themselves and on key themes and images that recur in ecological discourse by scientists and nonscientists. The predictions are assessed in terms of their foundation in fact, their congruency with historical trends, and the quality and temper of the reasoning offered in their support. The themes and images are scrutinized with an eye to the unarticulated or undefended metaphysical and physical assumptions that link the images into esthetically effective, emotionally plausible patterns. The predictions in question relate to the population explosion, the coming exhaustion of energy resources, the pollution crisis, and the specter of genetic engineering (test-tube babies, etc.). The modish metaphysical assumptions under examination include some that hark back to nineteenth-century beliefs (vitalism, the life force) and some that shrug off the faith of that age in the world's toughness ("instead of the Victorian concept that the web of life is a robust construction within which most species can find a place, it is now customary to emphasize the fragility of the system").

The writer's conclusions are, to repeat, unambiguous: Ecological extremists are wrong. They are wrong, first, because the facts do not support the notion that catastrophe is either inevitable or even probable. "The growth of the world's population is not nearly as inexorable as the environmentalists say. The threat of famine is receding, not coming closer. Minerals are now more plentiful than ever, whatever the more distant prospects. Lake Erie is not dead, and genetic engineering is neither a threat nor even a practical possibility."

They are wrong, second, because they pay little or no attention to the ways in which existing legal, administrative, and other techniques have been used to counter public nuisances. "The quality of water in San Francisco Bay has so improved in the past twenty years that shrimp are returning and the fishing has improved . . . . Is it not the case that air pollution has been decreasing in the past decade in British and American cities? That the pace of population growth in a great many developing countries has begun to decline as those populations have learned through prosperity and education to follow the ways by means of which the now advanced communities have learned to moderate the size of future generations?"

And they are wrong, third, because they are heedless of what can be done in the future. "The record of the past two million years," Maddox writes, "shows plainly enough that the survival of the human race is not dependent merely on the availability or the shortage of particular raw materials or even on a favorable climate, but on the deliberate exercise of human ingenuity. To assume that the equipment of spaceship earth consists merely of the stock of elements—things like iron and silicon—with which it was endowed 4,500 million years ago is willfully to ignore the way in which people, even

THE TREE WHERE MAN WAS BORN/ THE AFRICAN EXPERIENCE. By Peter Matthiessen/Eliot Porter. Illustrated. 247 pages. E. P. Dutton. $17.50.

THE SERENGETI LION: A Study of Predator-Prey Relations. By George B. Schaller. Illustrated. 480 pages. University of Chicago Press. $12.50.

In what must be one of the most stunning books of this or any year, Peter Matthiessen, the novelist and naturalist (*Race Rock, At Play in the Fields of the Lord; Under the Mountain Wall, The Shorebirds of North America*), and the photographer Eliot Porter (*In Wilderness Is the Preservation of the World, Summer Island, Appalachian Wilderness*) have put in tandem their passions and their impressive talents to evoke the human and natural history of East Africa—one of the world's last splendors and the greatest wildlife spectacle in the world. The conception of the book is the publisher's, and it is one of those ideas that really works. The volume is produced in oversize format to display to best advantage Porter's gorgeous and breath-taking color photographs. Matthiessen's 100,000-word text, which could be a book in itself (and was recently excerpted in three parts in *The New Yorker*), is both informative and intensely moving. As a picture-and-text portrait of East Africa, it reminds one only of Peter Beard's beautiful *The End of the Game* (1965); as text alone, it ranks with Isak Dinesen's (the Baroness Karen von Blixen) 1937 classic *Out of Africa*. Matthiessen combines three elements in his writing: a gift for acute observation of both wildlife and men, a sense of African tribal history and myth, and a vividly personal account of his own encounter with Africa. He traveled primarily in Kenya and Tanzania (mostly by Land Rover), sometimes alone, sometimes in the company of such other wildlife experts as George B. Schaller, who had come to the great Serengeti game preserve in 1966 to study predator-prey relations, and Iain Douglas-Hamilton, a scientist oblivious of risk and bent on identifying every elephant in the area by photographing it head on (to record ear nicks)—i.e., as it charged. Matthiessen's travels take him to remote and isolated tribes—there are hunters and cultivators, and some caught in between—and he writes of them with utmost awe and empathy—their primitive ways of life and sophisticated beliefs, and their tenuous relation to a modern Africa, embarrased at their existence. He writes

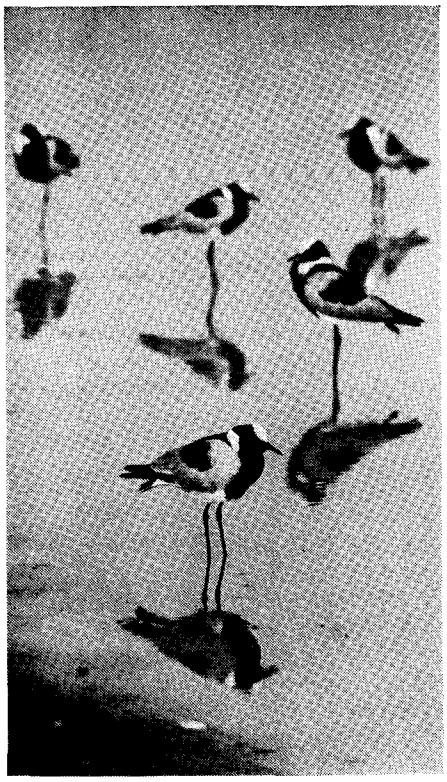


Photo from The Tree Where Man Was Born/The African Experience; *illustrations from* The Serengeti Lion

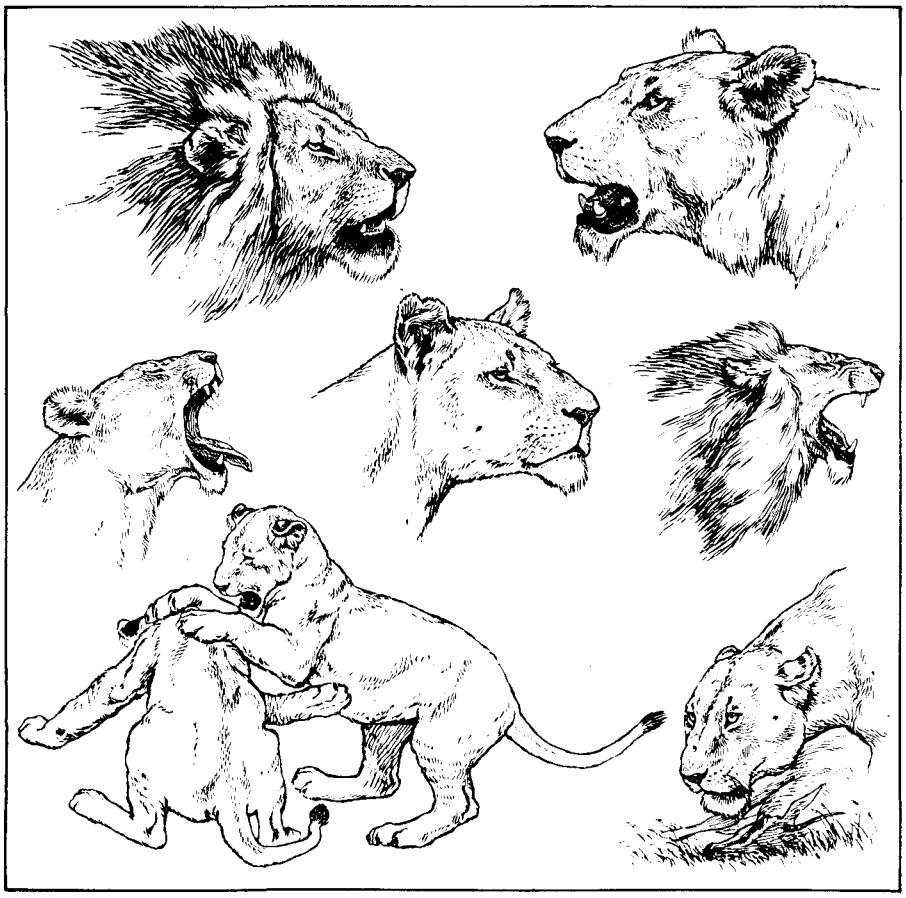
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

the most primitive people, have by ingenuity helped to ensure their survival or at least that of their children and grandchildren. Now, as throughout the past two million years, it remains a surprise that this species has kept alive against all the odds. No doubt the strangest irony of the extreme environmentalist position is that it has come into the open at a time when human beings are more than ever able to mold the environment in which they live, using it where possible, putting up with it where necessary."

As goes without saying, the enterprise of judging predictions of ecological disaster is complicated, requiring extensive knowledge of nature and of society, and in addition conversancy with the progress of research in a variety of scientific and technological fields. And from this it follows that the layman who seeks to judge the judge —to assess his earned authority—is obliged to fall back, speaking frankly, to a secondary position and assess standards of argument before substance. The standards of *The Doomsday Syndrome* are high. Maddox comes clean in an opening statement about his own basic position: "The doomsday cause would be more telling if it were more securely grounded in facts, better informed by a sense of history and an awareness of economics, and less cataclysmic in temper." The arguments he develops in criticizing the doomsters, while often demanding, are rarely supersubtle, and they are invariably accompanied by quantities of well-weighed evidence (from studies of mercury concentration in Swedish goshawks to the Cornell cloning experiments, with a thousand stops between). He seems never to shut his eyes to evidence not immediately corroborative of his personal view, doesn't shy away from confronting the opposition's conclusions directly, specifying the exact ground of his decision to contradict, and maintains throughout a critical perspective on his own fundamental optimism.

Thus, there's room in these pages not only for success stories about pollution control but for detailed accounts of environmental exploitation at its most mindless—witness Maddox's report on the British government's $100-million scheme for growing groundnuts in Tanganyika. Thus, when Maddox faces the ungrateful task of speaking harshly of the late Rachel Carson for scare writing about the links between DDT and cancer, he neither fudges nor trims: ". . . it would in most circumstances be held to be irresponsible of Miss Carson to have so chilled her readers with hints of horror which are so badly founded as this." And thus, whenever his materials appear insupportive of gloom, he's quick to warn against complacency, reminding his reader that the aim isn't to encourage do-nothingism but rather to energize people whose will to act sanely for ecological cause has been weakened by word that we're lost whatever we do.

Admirable as its argumentative strategy and knowledgeableness are, however, they are by no means the only warrant of merit in *The Doomsday Syndrome*. For some lay readers the credibility of the work is likely to derive less from them than from a subtler ground, namely, the familiarity of the symptoms displayed in the writing of the scientific doom mongers, the remarkable resemblances between these symptoms and the norms of the high literary culture of the past century. For generations the principal tempters to mindlessness in the world of arts have remained the same. The first tempter is doubt of the potency of human intelligence (antirationalism); the second is doubt about the possibility of a future (the apocalyptic mode); the third is doubt about the interdependency of humanization and democratization (elitism). Each tempter has offered, in a unique way, an escape from responsibility; each has also offered a stylish, striking posture capable of confer-



also of the ever-present game, the extraordinary landscape, the endless skies. Like this rare and powerful book, the Africa he and Porter evoke is finally timeless, majestic, throbbing with life, indivisible.

In a somewhat different way *The Serengeti Lion* by George B. Schaller (best known for his 1964 bestseller, *The Year of the Gorilla*) is equally entralling. Based on years of field observation, it is the most comprehensive scientific study yet published on the behavior of free-living lions—the formation of prides, male-female and cub-adult relations, population dynamics, hunting patterns (the lioness is the hunter), mating habits, facial expressions, and so on. The lion is seen as an integral part of the African ecosystem, and the book delves deeply into its relation with and to other wild animal species, the prey and rival predators—leopards, zebras, cheetahs, gazelles, hyenas, wildebeests, buffaloes—of the Serengeti wilderness. Illustrated with black-and-white photographs and superb line drawings by Richard Keane, the book conveys not only the fascination of its particular study of lion behavior but the drama and wonder and beauty of the intimate interdependence of all living things. □

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

FRASER YOUNG LITERARY CRYPT NO. 1531

A cryptogram is writing in cipher. Every letter is part of a code that remains constant throughout the puzzle. Answer No. 1531 will be found on page 84.

P YPG IXVAQF DO UPQQOT, VQFOT, XOPKMOT, ASQMOT PGF XVPTIOT UXPG XMI CMNO.

O. C. XVCO

WIT TWISTER NO. 295

Edited by ARTHUR SWAN

The object of the game is to complete the poem by thinking of one word whose letters, when rearranged, will yield the appropriate word for each series of blanks. Each dash within a blank corresponds to a letter of the word.

This sheath, superbly — — — — — —, and this fine sword

Were in — — — — — — wrought to serve the Lord.

The knight who owned them served no god but greed

And — — — — — —, stole, and killed to sate his need.

A.S.

Apologies are due to Col. Myron Birnbaum of Falls Church, Virginia, who, not Arthur Swan, was the author of Wit Twister No. 293.

Help Your Post Office

to Give You

the Best Possible Service.

Mail Early in the Day!!

ring an air of distinction on all who take it up. The antirationalist mocks the silly dutifulness of ordinary, humdrum thinkers, preening himself as a witty ironist; the man of the apocalypse mocks the bourgeois optimism of the problem solver, preening himself as a deep tragedian; the elitist mocks the aspirations of social democracy, preening himself as a cool aristocrat.

To claim that these features of the literary syndrome have simply been grafted onto ecological rhetoric is to go well beyond any speculation in *The Doomsday Syndrome*. But it is worth notice that John Maddox himself is refreshingly alert to the tempters—fully prepared, that is, to spell out the political implications of the high-fashion despair he attacks. He begins by asserting and demonstrating that "technology and prosperity are not the inherent nuisances of which the environmentalists continually complain but, rather, the means by which a better environment could be created." But he moves on from here to note that "one of the most cheerful aspects of [technological] developments is that the people whose load of misery is lightened are predominantly poor people" and to observe the conspicuous absence of minority-group representatives from the ranks of anti-economic-growth spokesmen. And he is unfashionable enough to declare straight out that postindustrial society is, in its marrow and to its glory, "a society with egalitarian tendencies. So much has been apparent for more than a century. Almost exactly a century ago, Alfred Marshall said: 'The question is not whether all men will ultimately be equal—that they certainly will not be—but whether progress may go on steadily, if slowly, till by occupation at least, every man is a gentleman.' This is in part a declaration that some forms of work can cramp if not destroy the spirit, and in spite of the talk of how the new technology is dehumanizing, who now afflicted by technology would willingly settle instead for the life of a Victorian laborer or a latter day peasant farmer on the Bay of Bengal?"

Is *The Doomsday Syndrome* an impregnable work? Not likely. Amateurs as well as professionals will easily find ways of entering contention with it. (One instance among dozens: Maddox doubts that the temperament of people in overpopulated countries, such as the Netherlands, proves crowding wrecks dispositions. But is not Amsterdam a clear match for Manhattan in the rudeness stakes?) Messrs. Ehrlich, Commoner, *et al.*, would surely be within their rights, furthermore, to assert that no alarm on any subject can be heard in the present culture of distraction unless voiced at hysterical pitch. It's proper also to note that some of the writers criticized in this book as extremists have climbed down a bit from their earlier, more apocalyptic positions. (The most notable is Dr. René Dubos, whose recent *A God Within* avoids hysteria; in many respects, though—especially in his sermons against growth—the distinguished bacteriologist remains committed to positions Maddox insists oversimplify the issues.)

And, finally, because John Maddox is, within defined limits, an optimist, he is open to misrepresentation and misuse by the complacent and the greedy.

On earth there never was, however, much in the way of a promise that complicated, flexible minds would win their way instantly to full understanding or just applause. What is plain now is simply that *The Doomsday Syndrome* has cleared away great cartloads of cant and attitudinizing about technology, the environment, history, and social change, and that, for its tone and manner of argument, it ranks among the more intelligently humane volumes on public affairs of recent years. Next comes a debate that could set the whole world straight. □

Going Home

A HISTORY OF ZIONISM. By Walter Laqueur. 640 pages. Holt, Rinehart & Winston. $10.

BY HERBERT GOLD

When Theodor Herzl came to England to find some friends, the colonel of a Welsh regiment, son of converted Jews, came to him and declared: "Sir, I am a Jew. My daughters are learning Hebrew. I shall work for the cause of Zion." But later, when Herzl returned, Colonel Goldsmid couldn't see him: "Busy reviewing my battalion." The English Maccabean Society, according to Herzl, were really Pickwickians.

The *petit histoire* of Zionism is, as usual, more revealing than grand conferences and manifestoes, and this very long and ambitious book by the well-known historian Walter Laqueur is generous with detail, in addition to being a study of all the confluent streams that led to the founding of the State of Israel. With a last desperate leap after nearly 600 pages, it concludes with

Herbert Gold is a novelist, essayist, and critic. His autobiographical My Last Two Thousand Years *has just been published by Random House.*

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

"Thirteen Theses on Zionism," an effort to make sense of a movement ultimately despairing, joyful, passionate, absurd, and inevitable. "All You Want To Know About Zionism" may have been the original idea. A collection of everything, with minor-key apologies for the everything that is left out. The technique of Zionism rather than the passion. And yet this grab-bag, scrapbook history does finally accumulate its energy and feeling and an element of comprehension, so that finally it is a valuable reference book to lay alongside the miles of verses, memoirs, invocations, prayers, journalism. The rage of Jews for Israel will not be comprehended here, but the evidence for that love is given; and, for those who can bring the rest of that feeling to the book, it is a valuable work.

For example, Laqueur describes how Uganda was seriously considered by Theodor Herzl and other aristocratic Zionist leaders as a solution to the misery of the Jewish millions of Eastern Europe. It was possible, available, abettable, practical; the climate was viable; with but one qualification—with all their hearts the Jews whom the Homeland would save wanted only Eretz Israel. They would not go to Uganda, no matter what good arguments were offered in congresses and in diplomatic exchanges. The matter continued along its inevitable course. Arkansas and Oregon had also been suggested as homelands for the Jews, and the Dominican Republic and the Argentine, and later Stalin came up with Biro-Bidjan, and it seemed that the friends of the Jews had many good ideas to distract them from what they needed. Now these suggestions seem foolish—a little like proposing to the desperate Irish that they settle, say, Saudi Arabia and be quiet, please.

Laqueur is particularly useful in his discussions of the differences between "political" and "practical" Zionism, between negotiating internationally and settling the land; the permutations—cultural Zionism, religious Zionism, socialist Zionism, the apocylyptic movements, the suggestions about Uganda and the Argentine, the dealing with the "money Jews," epitomized by the Rothschilds, and the mass of Jewry, epitomized by almost everyone else—make all distinctions zigzag in shape. History cracks the head with detail unless it comes in grand, distorting design, as in Toynbee. This is head-cracking history, and an excellent kind.

The book, as Laqueur remarks in his preface, is not "an exercise in the philosophy of history." What is valuable is the gathering of detail, an acceptance of what *is* as the essential

The accolade of age cannot descend on a product decorated with an imitation old-looking label. Here are some truly nostalgic items that have stood the test of time. *from left to right:*

Floris Shave Bowl

Velvety latherer in an elegant Elmwood bowl. $4.50

Violettes de Toulouse

Nestled in a charming Belle Epoque bandbox, ¾ oz. Perfume or 2¾ oz. Toilet Water each $9.50

Pino Silvestre Cologne

Crisp scent of the Pines of Rome by Vidal 3 oz. $7.50, 6 oz. $12.50 13 oz. $20.00

Spring Glory Soap

Made with golden cherry honey & beewax. Box of 3 cakes Hand $3.50, Bath $5.00

Hahn Hair Tonic

Europe's largest selling hair lotion. 4 oz. $2.50 7 oz. $4.00, 14 oz. $7.50

C.-M. Vetiver Cologne

Subtle, lingering reedy fragrance. 3 oz. $4.00 8 oz. $8.75, 16 oz. $16.00

All major charge cards accepted. Kindly include charge number. Visit our historic pharmacy at 518 Lexington Ave. (48th St.) or send $1.00 for two issues of our unique catalog. Sorry, no C.O.D.

CASWELL-MASSEY CO. LTD. ★ EST. 1752

★ AMERICA'S OLDEST

ITEM	Size	Price	Qty.
Floris Shave Bowl			
Violettes de Toulouse			
Pino Silvestre Cologne			
Spring Glory Soap			
Hahn Hair Tonic			
C.-M. Vetiver Cologne			

Name:
Address:
City:
State: Zip:

SR 102872

NEW YORK, N.Y. 10014 ★

CHEMISTS & PERFUMERS ★ 320 W. 13th ST.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

truth of what is to be reckoned with. He shows how both believing and nonbelieving Jews found an anchor in Zionism for their yearnings for community. Zionism emerged out of the blood nationalisms of Europe, but the traditions, the religious and cultural bonding, the flickering light of Jewish settlement in Palestine, the family feeling among Jews in dispersion, all made Zionism something profoundly different —uniting, despite their differences, desert brawlers, Russian revolutionists, adept Americans like Rabbi Wise, and the German mystic Martin Buber. At first, to assimilating German Jews, Zionism seemed a "giving-in to the forces of unreason"; later it seemed that human nature must be recognized in all its irrationality, and anti-Semitism, a special variety of xenophobia, needed the Zionist answer in addition to all the other incomplete answers. As Laqueur points out, Zionism is a late-nineteenth-century word for a movement that had, in fact, never died. Hassids had emigrated to Palestine in the eighteenth century. Jewish colonies had always existed in Palestine, with links to the Diaspora, despite the supposed expulsion.

Moses Hess, a Zionist precursor, described two "unfortunate peoples" who still identified with dead institutions— "the Chinese, a body without a soul, and the Jews, a soul without a body, wandering like a ghost through the centuries." It is curious that in the hundred years since, both these languishing peoples have revived, leapfrogging traditions to make connections with their glorious pasts. The liberal assumptions turned out to be untrue —that peoples could be assimilated to the modern world without a secure base in nationhood. Neither the Chinese nor the Israelis are now merely, to borrow the lugubrious phrase of a Tennessee Williams play, a "proudnancient people," (pronounced as one negligent nonword.) Religious feeling cannot be reproduced at will, but a sense of solidarity with history and family is available to all except the most selfish. The slogan of the Slavophiles, "It Is Time to Go Home," echoes for all peoples isolated and cut away from their roots. Among the many surprises here is the little detail that Dr. Zamenhof, the inventor of Esperanto, the world language, also considered the Zionist solution.

The early days of this history are as sad as any in the history of Jews. Grown men patiently argued: No, the Jews don't eat Christian children; yes, the Jews will be peasants if only they are allowed to till the soil. For many it was only after the futility of these discussions—and the recurrent pogroms and enduring misery of the millions—that they came to Zionism. Leo Pinsker decided that the Jew in Europe was a stranger and a beggar because he did not have his own place in which to offer hospitality. When he had a nation, he could be an honored guest elsewhere on conditions of equality.

Anguished philosophic and psychological reasonings did not prepare the "Lovers of Zion" for the facts of malaria. They came to Turkish Palestine with biblical citations but ignorant of the eucalyptus trees that should have been planted at Hadera, and they died in deserts and swamps as they were dying in the pogroms of Kishinev. And the European Zionists found rabbis in Jerusalem, descendants of Jews who had never left, whose main concern was debating whether the Apples of Paradise, needed for the observance of the Feast of Tabernacles, should be imported from Corfu or grown in Palestine. Not even the Jews resident in Zion were all Zionists.

In the mythology of Zionism the return to Israel was generated by Theodor Herzl, a black-bearded and handsome Viennese journalist and playwright, inspired by a vague dream that has persisted through the two thousand years of Diaspora. In my childhood Palestine was the place to which I sent paper leaves, purchased in Cleveland for 10 cents each and totaled mysteriously in a New York office until assembled into trees, which were then promptly planted on some three-colored desert far away. For most Americans today Israel is that gallant little state, like Belgium or Switzerland if it survives, like Biafra if it doesn't, which presents terrible moral options to Jews and everyone else.

More light is needed. This book finally offers no inspiring vision, but it does the brute work of assembling history in some perspective. The intelligent reader can begin the job of sorting. New shelves of books will follow; this peculiar turning in the history of a people is only at its beginning. The "miniature of the people of Israel," which Ahad Ha'am envisioned, a kind of Jewish Vatican in Palestine, has become, thanks to the Holocaust and Arab politics, an embattled nation and a crucial problem for the entire world. It will not disappear, as Biafra did, but the lesson of Ibo desperation has finally been learned by the Jews. Power corrupts, and it also redeems. The history of Zionism, an international cultural and spiritual movement, has entered its new stage, a real society on a real spot of earth, and historians of the future will treat it as the preface to the history of Israel. □

SHORTER REVIEWS

ALBERT EINSTEIN: Creator and Rebel. By Banesh Hoffmann with Helen Dukas. Illustrated. 272 pages. Viking. $8.95.

How does one take the measure of a genius? Banesh Hoffmann, who worked with Einstein at Princeton's Institute for Advanced Study, decided that science was "so much a part of the man, so central to his being, that no biography can be more than anecdotal and superficial that passes over it lightly." So this valuable book, written with the collaboration of Einstein's

Einstein in the Swiss Patent Office in Bern where he worked until 1909

secretary, Helen Dukas, accordingly devotes more time to Einstein's work than to his personality. Since this work is still by no means easily understood by the lay reader, Hoffmann adopts a tone of professorial benevolence, peppering his narrative with gentle admonitions ("Watch closely. It will be worth the effort"), providing charts, graphs, anecdotes, and, all in all, telling the story with such patience and enthusiasm that we follow along like students who may not have quite got that last point on quantum mechanics but who are nevertheless eager to hear the lecture. And should our minds still be inclined to wander, he provides the further carrot of more conventional biographical information—sketches of Einstein from childhood to his seven years in the Bern Patent Office (the time of his Theory of Relativity), to the golden days of Berlin in the Twenties, to the legend-in-residence at Princeton. It is a story that has been told before, of course, but rarely with such warmth and undisguised respect. And in the end Hoffmann's technique proves its

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

worth: By taking us step by step through the intricacies of Einstein's work, Hoffmann gives us a far more illuminating portrait of the man than any catalogue of residence changes and domestic quarrels could. We perceive not merely that sense of excitement generated by scientific investigation but those qualities that formed Einstein's character—his simplicity, his hatred of authoritarianism, his profound belief in an awesome unity and in a Spinozan God. In some humble way it is like watching a mind at work, logical point to logical point, until, abruptly, that leap to where no mind had been before.

WILL CALIFORNIA FALL INTO THE SEA? By Peter Briggs. 243 pages. David McKay, $6.95.

Nifty title—but the answer is: No, not for another sixty million years. So much for that. The rest of the book is about how earthquakes are a part of life along the volatile San Andreas Fault, how a really big one is overdue and may strike at any minute, how it could devastate Los Angeles or San Francisco (and exact a much larger toll than the quake and fire of 1906), and how blindly and complacently unprepared Californians are for it. The facts are awesome, the possibilities are scary, the ostrichlike attitudes of both citizens and officials almost criminally court disaster. Unfortunately, Peter Briggs's prose is more pasty than persuasive. His tone can only be called seismic, flat and tedious most of the time, with occasional eruptions—accounts of previous earthquakes and what worse might have happened but (annoyingly, is the feeling) didn't, a pretend report of a future disaster (160,000 dead in Los Angeles County, another million injured, property damage estimated at $20 billion and later doubled). In these hyped-up moments the book verges on hysteria—which is, of course, just what one is cautioned to avoid when the earth does in fact begin to rumble, shake, and heave.

WINTER TREES. By Sylvia Plath. 64 pages. Harper & Row. $5.95.

This last collection of Sylvia Plath's work contains a group of poems written during the last year of her life (the period of the *Ariel* poems) and a longer poem for three voices written sometime before. It would be a mistake, however, to assume that these are the mere leftovers of former, and greater, collections. If no one of these "Late Poems" seems as powerful as the greatest of the *Ariel* group, they are, nevertheless, extraordinary pieces of work—astringent, beautiful—and the longer poem, "Three Women," is one of the most painful accounts of childbirth ever written. The collective force of the book is to inform us once again that Sylvia Plath is special, an original—there is no one quite like her, and her imitators have been paler than most. Plath means to be harrowing, and she is harrowing; these poems, like those in *Ariel*, are written at the edge of a sensibility impinged upon everywhere by an abrasive world. The fact of her suicide, of course, has made it impossible to read her without the confusion of associations that that event inspires, but the result, for whatever reasons, has been to bring her even closer to her audience and make them participants. What can be overlooked in this phenomenon—and what this book reminds us—is that she is an excellent poet, a dazzling manipulator of language, from the moon "luminous as a nurse" to larger statements of dread: "I feel a lack./ I hold my fingers up, ten white pickets./ See, the darkness is leaking from the cracks./ I cannot contain it. I cannot contain my life."

THE SOCIAL ANIMAL. By Elliott Aronson. Illustrated. 324 pages. Viking. $7.95.

This is one of those books that purport to tell us, under the sanction of scientific observation, why we behave the way we do, and it is sillier than most. Aronson, who is a professor of psychology at the University of Texas, is interested primarily in how people influence each other; thus he takes on such topics as conformity, mass persuasion, and aggression. Because human behavior is endlessly fascinating, there are nuggets of interest scattered here and there, but they are mostly on the level of pop-psychology games in the Sunday supplements. Indeed, there are even visual aids, in the form of Saul Steinberg cartoons. It is hard to determine whether Aronson is writing down to his audience or just doing the best he can. He is given to such statements as, "For a person to believe that Orientals are sneaky implies strongly that he doesn't like Orientals," and "Most people are motivated to justify their own actions," and "People, if given half the chance, will try to look good." This is the sort of thing that makes skeptics want to rush back to such behavioral indicators as the weather and housemaid's knee, and it is all the more discouraging because Aronson has set his book up, at least in part, as a defense of social psychology as a discipline. The thorniest question of all, the ends of this kind of behavioral research, is dispensed with in a two-page section labeled "The Morality of Finding Out Unpleasant Things," whose only value lies in its implicit confirmation of his self-justification observation. □

Beings & Nothingness

ELLA PRICE'S JOURNAL. By Dorothy Bryant. 227 pages. Lippincott. $5.95.
GLASS PEOPLE. By Gail Godwin. 208 pages. Alfred A. Knopf. $5.95

BY GENEVIEVE STUTTAFORD

Rebellious ladies have never fared very well in fiction. Even in our own era of consciousness raising ten years have passed since Anna, in Doris Lessing's *The Golden Notebook,* first wondered: We are the new women, but where are the new men? Apparently, the breed doesn't exist, and the fictional ladies who defy the conventions are still having to go it alone, as Ella Price must at the close of Dorothy Bryant's first novel, *Ella Price's Journal,* or else they lose courage and retreat, as does Francesca Bolt in Gail Godwin's *Glass People.*

The two characters are totally unlike each other—plain, suburban, ordinary Ella; exceedingly beautiful, rich, indulged Francesca. But, because they are women, it doesn't actually matter who they are or what they are. They *are* only through other people, with no personhood or identity, but only wifehood or motherhood. And once Ella and Francesca pursue self-identification, unsure and floundering every step of the way, the underpinnings of their lives wobble. Becoming conscious of themselves, they become problems to everybody around them. For Ella Price, finally, there is no other answer but to shed the husband she has outgrown. In the last line of her journal she is able to write, "I feel," and thereby serves notice to herself of an accomplishment and the absolute rightness of her decision.

At first we're told the bare, the only, facts about Ella. She is the mother of a teen-aged daughter, thirty-five years old, married to a civil servant, lives in a suburb near Berkeley, California. Sensible, supportive, and accommodating, she is a model of middle-class womanhood. Her discontent seems to her neurotic, something vaguely unhealthy that should be kept in check. What right has she, Ella wonders, to inflict her agitation on her daughter's contented adolescence or to force her husband to grow intellectually beyond the Doris Day movies he loves? "I'm happy," he tells her, "if I can eat, drink and screw." So Ella takes up the slack of her life by returning to college, a small community school, where she starts a daily journal as a class assign-

Genevieve Stuttaford is an associate book review editor of SR.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ment. The novel is made up of Ella's five notebooks, covering a period of about a year-and-a-half.

The journal begins awkwardly because Ella is inarticulate and hesitant. But she gradually opens and levels with herself; her defenses come down, and her malaise comes into focus. The author has chosen a cumbersome technique; yet, written in the first person, the novel takes on the immediacy of an ongoing conflict with the outcome uncertain until Ella herself discovers it. Snatches of conversations Ella chooses to record, bits and pieces of observations, the selected minutiae of her life accumulate to shape and define to Ella the frustrations she feels with her constricted and constricting role.

The novel's impact is diluted only because, in exploring Ella's inner life, the author has roamed too far into the outer world. Bryant wants to gather it all in, to show how Ella reacts to every circumstance from student unrest to the peace movement and the civil rights struggle. And the irony of an affair Ella has with her English professor is too predictable too soon. Her recurring dream of having another baby, misinterpreted by Ella (and by her male psychiatrist) as a need to rediscover her lost femininity, is to the reader too obviously symbolic of Ella's struggle to give birth to herself. Nevertheless, this is an affecting novel, a first-rate work by a talented new writer. Bryant has taken a general cultural phenomenon and succeeded in giving a very precise meaning to that "shock of recognition" Libbers talk so much about.

Ella Price learns to stand, but Francesca Bolt in Gail Godwin's second novel, *Glass People*, makes the mistake of trying to jog before she masters a crawl. From birth Francesca has been dealt too good a hand, by her father, her stepfather, her mother, and most recently her husband, Cameron, a fiercely ambitious district attorney in Southern California. They have each made a fetish of her pristine looks; nothing else is expected from her. "I don't want to go back to Cameron," she tells a lover, but then asks, "What could I do instead?" "Any number of things," he replies, not really interested; "What would you have done if you had never met him?" Francesca hasn't a notion. "I had no idea what I was going to do when I did meet him. In a way he saved me from having to find out."

During their four years of marriage Cameron has taken over every function of their household. His floors shine, and in the morning juice is squeezed fresh. Under his guidance the mechanics of their daily lives move with the precision of a finely crafted instrument. Francesca is freed to spend her days plucking the hairs from her legs, one by one. She labors over the activity, making it fill the hours. Francesca is languid and lacks energy and will. She has no apparent ego, seemingly little intelligence, and no clear concept of herself. She is kind and capable of responding to the needs of others, if only someone would let her.

People continue to let Francesca down, especially women from whom she naïvely expects more. Her gay, frivolous mother, with whom she had always felt intimate, suddenly vanishes rather than reveal her own unsuitable third marriage. Francesca finds her in a run-down, isolated mountain cabin in New England. But her mother rejects any chance of closeness: "Remember, for some of us, having a man is nothing to sneeze at."

Francesca's week in New York, her escape from Cameron, is a disaster, a comic opera that is poignant and nutty by turn. She is an innocent. In one of the most effective episodes of the novel, Francesca is caught in a symbiotic relationship with a lady writer named M who has advertised for an "amanuensis." The last one has long since decamped, and M is left with stacks of unpaid bills, a filthy apartment, and rotting food in the refrigerator. M is a gross, muumuu-clad woman with a shaved head. A true eccentric, Francesca thinks with pleasure, and, of course, she takes the job.

But Cameron must eventually come to collect the shattered pieces of Francesca. She's never going to make it on her own. She mistakes Cameron's possessiveness for love and is relieved to be back with him. Pregnant with another man's child that Cameron is perfectly willing to accept, Francesca lives contentedly, stuffing her expanding body with the sumptuous food Cameron prepares for her. She is secure in the knowledge that he will see to it that she never becomes unattractively heavy.

The characters in *Glass People* are meticulously drawn and effectively realized, the facets of their personalities subtly, yet precisely, laid bare. The author is coolly neutral, and she makes no judgments. This is the way it is, Godwin is saying, and you must decide who the villains are. □

Answer to Literary Crypt No. 1531

A man should be taller, older, heavier, uglier and hoarser than his wife.

E. W. Howe

ON THE DOCKET

BY O. L. BAILEY

Somehow, the crisp season, with leaves crackling like cornflakes and changing like wildfire, couples neatly with the recent crop of mysteries. Most of them involve favorite sleuths or some promising comers, conjuring up visions of firelight, fog, and criminal quarries. Needless to say, these last are tracked down to their inevitable end by masterminds, variations on the indefatigable Sherlock Holmes. Aficionados, of course, whether they be armchair or active, can take heart from the fact that, although Holmes has retired to keep bees on the southern slopes of Sussex Downs, he is alive and well. There was a time when the world had thought him dead as a result of his encounter with his archenemy, Professor Moriarty, at the Reichenbach Falls. As the world now knows, he didn't die but allowed himself to disappear into the wilds of Tibet. It was there, from the venerable lamas, that he learned the secret of long life. Someday, perhaps, he will come out of retirement; meanwhile he remains a comforting background presence and an inspiration to those modern descendants on the scene who carry on their highly individual pursuits of criminals.

Unlike Holmes, Inspector Maigret, Georges Simenon's famous creation, is not given to elaborate deductions springing from physical clues. He immerses himself in the atmosphere surrounding the crime, wandering the streets to observe the ordinary details of life in a particular quarter. Infinitely patient, he will ask "irrelevant" questions over a glass of wine at the local café, pore over reports that flood his office, and probe the minds of those involved until the person he seeks reveals himself.

Simenon's latest, *Maigret and the Madwoman* (Harcourt Brace Jovanovich, $5.95), like many of the Maigret cases, is as much a character study as a criminal investigation. A little old lady (sherry and stamina, *not* lavender and old lace) feels she is being threatened and seeks Maigret's help. With game persistence she gets to see him. Although his colleagues think her completely dotty, Maigret decides to indulge her or, perhaps, himself. By the time he does, it is too late. She is dead. Feeling personally responsible, he embarks upon a search for her killer. Regrettably, however, this case is just passing fair, with only the famous ambiance of Maigret's microcosm to recommend it.

It is a pleasure to report that Maj Sjowall and Per Wahloo are in peak

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Why be a sitting duck for crime?

There are all kinds of things you can do to be safe in your home . . . on the street . . . while traveling. *This book shows you how.*

If you have never been burglarized, mugged, or robbed, someone you know undoubtedly has. You probably suspect that it's only a matter of time until they get around to you. Is there anything you can do except wait to get hit — and hope it won't be too bad?

Yes — plenty!

You don't have to surrender to crime. Not when there are so many steps you can take now that will dramatically cut down your chances of being a victim. Many of them will cost you little or nothing. And those that do cost some money may save you far more.

They are all spelled out in a new book called **BEING SAFE:** *The Complete Guide to Protecting Your Person and Your Property — What to Do, What to Buy, and What to Do With It.*

- **How to choose a safe house or apartment.**
- **Protecting your car** from car clouts, car strippers, and car thieves. Also, your bike or motorbike.
- **How to buy security equipment and services.** Things to watch out for in a field heavily infested with rackets.
- **Security at the shop or office.** How employees and employers can foil sneak thieves, con men, and embezzlers.
- **Crime insurance.** The types available, and what they cover.

Finally, you learn what to do if you are the victim of a crime. Here is important advice that can help the police recover your property and maybe even catch the criminal. It could also save you from serious injury or death.

Here is what this book shows you:

- **Over 100 general common-sense anti-crime measures** — just for a start.
- **How to make doors and windows break-in proof.** The newest special locks and other gadgets.
- **Crime deterrents, conventional and exotic** — from safes and guard dogs to the latest in electronic alarms.
- **Basic apartment-house security:** what tenants and landlords can do to make a building safer. With a special word about brownstones.

You are *not* helpless. So stop waiting to be hit. Start fighting back — now.

Ten-day examination offer

You are invited to examine BEING SAFE at your leisure for ten days — and then, if you do not agree that it is filled with information that can help protect you from crime, return it for full refund. $6.95, now at your bookstore, or mail this coupon, with remittance, to Saturday Review Press, Order Dept. S-11 230 Park Avenue, New York, N.Y. 10017.

MAIL THIS COUPON TODAY

To your bookstore or
SATURDAY REVIEW PRESS Order Dept. S-11
230 Park Ave., New York, N.Y. 10017

Please send me.....copy(ies) of Mel Mandell's BEING SAFE @ $6.95. I enclose my check or money order (including sales tax where applicable). I understand that if not satisfied I may return book(s) within 10 days for a full refund.

Name.....

Address.....

City.....State.....Zip.....

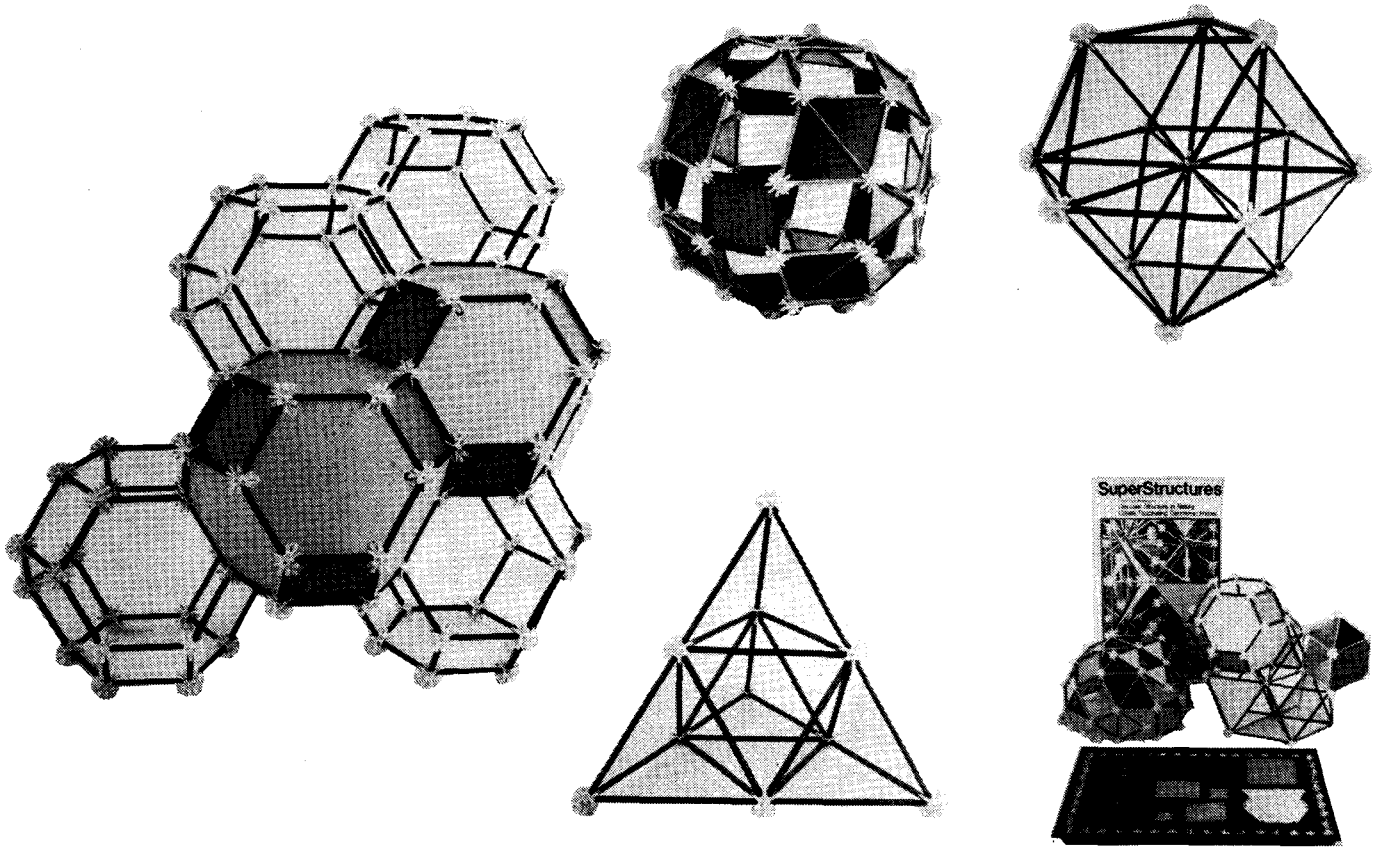
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Let Nature Teach You and Your Child Her Secrets of Form, Space and Structure with Three Revolutionary New Products.

The inner structures and patterns of Nature herself inspired these unique playthings. They help explain the wondrously simple principles of symmetry, balance, cell structure, geometry and structural relationships... yet provide so much fun, children and adults won't even know they're learning!
All three products are designed by Peter Pearce, author of *Structure in Nature as a Strategy for Design* and former Associate Dean of the School of Design of the California Institute of the Arts. These products are guaranteed to be enjoyable as well as educational. So read our description of each and decide which ones you want the most for yourself, your children, your friends and relatives... young and old.

SuperStructures™

No one knows better than Nature how to organize space and create structure, beautifully and simply. So we went to the molecule, the crystal and the cell to create this revolutionary new building kit for adults and children 6 and older. Without ever saying "geometry," the builder can make a truncated octahedron. Or a fanciful bird. A tower or a house. The possibilities for imagining and creating are endless. It's all made possible by a 1⅛″ patented star-like connector called **The Universal Node.** This magic unit has 26 spokes of three shapes: triangular, square and rectangular. Three corresponding plastic "branches," coded by length, shape and color, yellow, orange and purple, fit onto the spokes. So the builder can't miss in making his dream world come true. In building structures of Nature all by himself. And in creating beauty, too!

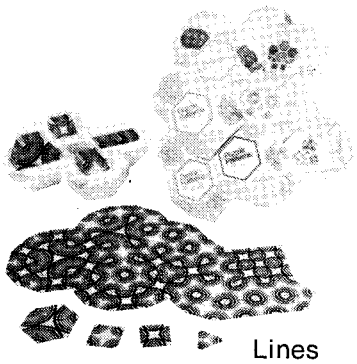


#201 **SuperStructures Regular** (84 Pieces) $ 5.95 (+ $ .75 postage/handling)
#202 **SuperStructures Medium** (128 Pieces) $ 9.95 (+ $1.25 postage/handling)
#203 **SuperStructures Large** (300 Pieces) $19.95 (+ $1.75 postage/handling)

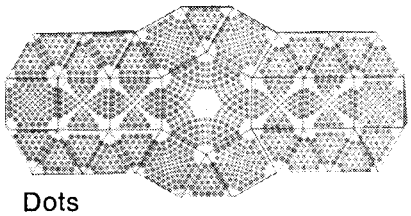
PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

PuzzlePatterns™

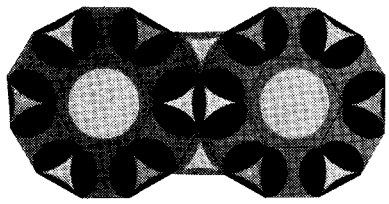
Here's a "puzzle" that has a different solution each time you do it! In doing it, using the endless creative possibilities, you will learn many of Nature's basic ordering principles. And the infinite diversity possible using simple geometric shapes. The shapes tell how the pieces fit together. But your own artistic and design sense determine the final pattern. A child of 3 can do this "puzzle" with great fun and absorption. As age increases, the subtleties and possibilities grow—so a teenager will enjoy it immensely. And so will an adult! *Tessellation,* the principle in Nature of repeating patterns, makes PuzzlePatterns so intriguing. Comes in three versions, each in its own beautiful geometric package, Lines (blue and dark blue), Dots (orange and magenta) and Shapes (blue, yellow and orange). There are 180 plastic coated pieces—more than enough to cover an area of 18″ x 24″—so you can glue a completed pattern on a board and hang up your original work of art.



Lines



Dots

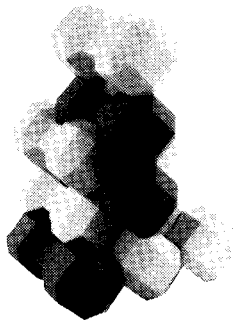


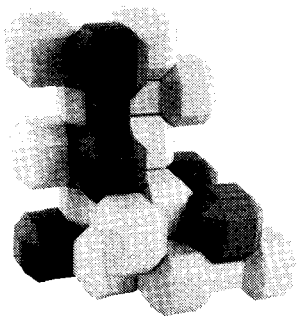
Shapes

#101 **PuzzlePatterns Lines** $4.95 (+ $.65 postage/handling)
#102 **PuzzlePatterns Dots** $4.95 (+ $.65 postage/handling)
#103 **PuzzlePatterns Shapes** $4.95 (+ $.65 postage/handling)

Rhombones,™ Better Blocks!

In the amount of fun it provides (and the basic learning, too), Rhombones makes all other blocks old-fashioned. They develop in the small child ("Ages: 2 to some bright adults") an awareness of the relationships of one shape to another, with forms that fill space in the same way Nature does. He can balance them, stack them, bridge them, even cantilever them. They look like bones—a funny shape that he'll love. And he'll have fun with them for hours. They contain 10 blocks in orange, yellow and purple. Each block is 5¼″ long by 2¼″ wide. To get your child started, 11 examples of what he can build are illustrated on the package. Very durable, made of molded, high impact polystyrene.





#301 **Rhombones, Better Blocks!** $2.95 (+ $.50 postage/handling)

The Armchair Shopper, Inc. Dept. 152
380 Madison Avenue
New York, New York 10017
Please send me the items checked below. I enclose check or money order.

Special Offer: Order $25.00 or more (not including postage/handling) and get a free set of Rhombones, Better Blocks!

Gift Card Offer: If you wish to send item(s) to person(s) or address(es) in addition to that specified above, please indicate on a separate sheet. We'll enclose a gift card in your name.

Name_____

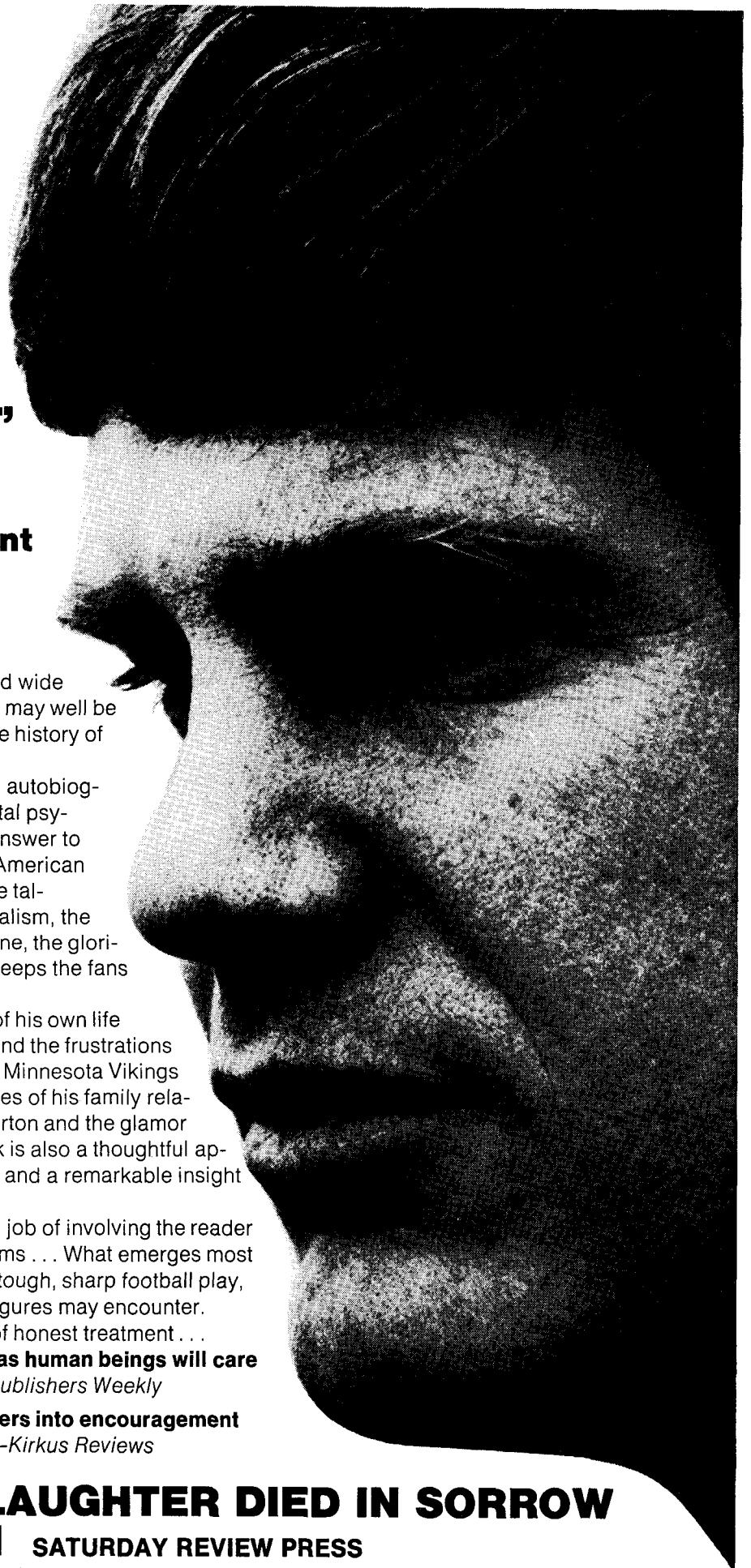
Address_____

City_____State_____Zip_____

Satisfaction guaranteed or return the entire set within 10 days for prompt and full refund.

Quantity		Price	Postage & Handling per item	
SuperStructures				
_____	#201 Regular	@ $ 5.95 ea.	+ $ .75	_____
_____	#202 Medium	@ $ 9.95 ea.	+ $1.25	_____
_____	#203 Large	@ $19.95 ea.	+ $1.75	_____
PuzzlePatterns				
_____	#101 Lines	@ $4.95 ea.	+ $.65	_____
_____	#102 Dots	@ $4.95 ea.	+ $.65	_____
_____	#103 Shapes	@ $4.95 ea.	+ $.65	_____
Rhombones, Better Blocks!				
_____	#301 Rhombones	@ $2.95 ea.	+ $.50	_____
	Sales Tax (New York & Calif. residents only)			_____
	Total Amount Enclosed			_____

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED



LANCE RENTZEL,

the story of a man who had everything: brains, talent, a brilliant career, a lovely wife —and nearly lost it all

Lance Rentzel is a twenty-nine-year-old wide receiver for the Los Angeles Rams. He may well be the most publicized wide receiver in the history of football.

Now, in this courageous and candid autobiography, Rentzel deals with his almost fatal psychological flaw and his search for an answer to this problem. It is also the story of the American way of football: the programming of the talented youngster to achieve professionalism, the excesses of the college football machine, the glorification of the ritualized violence that keeps the fans deliriously happy all Fall.

Rentzel not only offers up the facts of his own life the early triumphs of his school days and the frustrations of the first stages of his career with the Minnesota Vikings and the Dallas Cowboys, the ambiguities of his family relationships, his marriage to Joey Heatherton and the glamor of the Hollywood-go-round — his book is also a thoughtful appraisal of the forces that drive athletes and a remarkable insight into the psychology of sport.

"Rentzel . . . does a very compelling job of involving the reader in his own personal and mental problems . . . What emerges most interestingly here, in addition to some tough, sharp football play, is the *machismo* problem that sports figures may encounter. Rentzel's story . . . deserves this kind of honest treatment . . . **The reader who cares about people as human beings will care about this book."**—BARBARA A. BANNON, *Publishers Weekly*

"Rentzel manages to transform sniggers into encouragement and contempt into understanding."—*Kirkus Reviews*

WHEN ALL THE LAUGHTER DIED IN SORROW

by Lance Rentzel SATURDAY REVIEW PRESS

• Selection of the Sports Illustrated Book Club • Literary Guild Alternate

photo: © Joel Baldwin

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

form with *The Abominable Man* (Pantheon, $4.95). More's the pleasure because the last two books in their Inspector Martin Beck series did not live up to the great expectations the quartet of impressive predecessors conditioned us to expect. In *The Abominable Man* a police captain is brutally murdered in his hospital room. Beck, chief of Stockholm's National Homicide Squad, and his colleagues are galvanized into action. What they discover is a bestial world that has the cop's badge of respectability at the core of its corruption. *The Abominable Man* is a superb rendering of the police force within a decaying society and a frightening portrait of madness rooted in respectability.

An absolutely scathing look at contemporary South Africa is provided in *The Steam Pig* by James McClure (Harper & Row, $5.95). This is a first novel that is uncanny in its multileveled perceptions. It is a grotesquely vivid picture of life under apartheid. But it is also a first-rate murder mystery with a solution that is a shocker. The pace is relentless, the prose riveting, and the pair of detectives—Tromp Kramer, white, and Bantu Detective Sergeant Mickey Zondi—remarkable. Not to be missed, or lightly dismissed as just another murder mystery, it is the essence of what the best of the genre aspires to.

India, another tropical setting, is the scene of H. R. F. Keating's Inspector Ghote (pronounced "Go-tay") adventures. The Inspector, a detective in the crime branch of the Bombay CID, is milk toast in curry country. He is an endearing example of "nothing succeeds like failure." Which, unfortunately, is a backhanded way of leading up to Keating's latest saga, *Inspector Ghote Goes by Train* (Crime Club, $4.95). The plot doesn't so much thicken as clot. I prefer the refuge of fond memories for *Is Skin-Deep, Is Fatal* (1965) and look to the future for more of the same caliber.

The nineteenth-century London of Holmes and Watson and the return of that delightful Scotland Yard team, Sergeant Cribb and Constable Thackeray, make *ABRACADAVER* by Peter Lovesey (Dodd, Mead, $4.95) pure entertainment. The artistes of London's famed music halls are being insidiously sabotaged. Moustaches twirl, ladies take to their beds with the "vapours," (alimentary, my dear Watson), and, when it all gets sticky wicket, edicts echo across the Thames: "The Yard has watched and waited long enough." Lovesey (author of *The Detective Wore Silk Drawers* and *Wobble to Death*) has a special flair for re-creating Victorian England with to-the-manner-born wit. I love Lovesey.

Far afield from Victorian vicissitudes is *The Stalking Horse* by Abraham Rothberg (Saturday Review Press, $5.95). Somewhat off the beaten spy path, the characters have a special kind of charisma, and the plot is pure panache. It's all about intelligence agents par excellence behind and in front of the Iron Curtain. Everyone has a double cross to bear. As with all good spy stories, you're never quite sure who is deceiving whom until the very end. If you think that is as it should be, and I do, then you won't want to put this one down.

The Shrewsdale Exit by John Buell (Farrar, Straus & Giroux, $6.95) also rivets one's attention (until the final pages), but for very different reasons. This is one of those books in which an innocent outing is transformed into a nightmare—one that instantly changes the course of a man's life. (In this case a carefree vacation ends in brutal rape and murder.) Buell treats us to some fascinating insights into the paradoxes encountered by the men who enforce the law, together with laconic delineations of how convicts organize their prison societies. But Buell cops out (pun not intended). He wraps it all up with one of those ambiguous endings that leaves you cliffhanging. *The Shrewsdale Exit* can still be recommended, but its ending turns a sure-fire winner into an also-ran.

Cops and Robbers is more than a game in the talented hands of Donald E. Westlake (M. Evans, $5.95). It is a custom-built caper, crafted by two of New York's finest, fervently wishing to get rich and away from it all. One of them conceives a plan that can't possibly be executed without a grant in aid from the Mafia, sweetened, of course, by an offer the big M. can't possibly refuse. The rougher the going gets, the more intrigued you'll become. Westlake's uniformed duo is definitely cops with cache.

In Trevanian's *The Eiger Sanction* (Crown, $6.95) an art professor moonlights as murderer and mountain climber extraordinaire. It's all high adventure that is supposedly witty and with-it, but actually altogether wearying in its strain on the plausible. Its intended hero, Jonathan Hemlock, is an unpalatable substitute for James Bond, and Cherry, who (we are asked to believe) is the only twenty-four-year-old virgin on Long Island, is no match at all for Pussy Galore. The novel is being touted as one of this year's big winners, but it's more like a big put on, *sans* class. □

Answer to Wit Twister, page 80: tooled, Toledo, looted.

NUMBERS, PLEASE!

ATTACH LABEL HERE

The numbers and letters on the label that brings Saturday Review your way each week may not mean much to you at first glance. But they are essential in helping our Subscription Department quickly identify your records. That is why it is important to include your address label whenever you write Saturday Review about your subscription.

CHANGE OF ADDRESS

Please let us know *at least four weeks before you plan to move.* For fastest service, clip or paste your current mailing address in space provided, fill in your name and address, and mail to Saturday Review's Subscriber Service Division.

NAME

ADDRESS

CITY

STATE ZIP

Saturday Review

SUBSCRIBER SERVICE DIVISION
Box 2043, Rock Island, Illinois 61207

Mailbag Note

Please address comments about articles that have appeared in *Saturday Review* to: Letters to the Editor. Inquiries should be sent to: Reader Services. Poetry, article suggestions, and manuscripts should be sent to our Contributors Department. The address for all of the above is 450 Pacific Avenue, San Francisco, California 94133. Manuscripts, poetry, and cartoons will not be returned unless accompanied by a stamped, self-addressed envelope.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Dance

Marathon

BY WALTER TERRY

"Dance Marathon" was the title selected two years ago to designate an extensive season of dance performed by a variety of companies under one producer. Such a marathon is now under way in New York. The City Center American Dance Marathon '72, produced by Charles Reinhart and presented by the City Center of Music and Drama at the ANTA Theater, is offering, in a six-week run, eighteen dance companies (two of them from California) and two soloists, in repertories that include several premieres. Most of the participants are modern dancers, although ballet and pantomine are also represented. The age span? From experimenting, avant-garde youngsters to veterans (dancers as well as choreographers) with sixty years of experience behind them.

The veterans launched Marathon '72 with the José Limón Dance Company (Limón himself no longer dances) and Lotte Goslar's Pantomine Circus. Miss Goslar, who has been kicking up her heels since the 1920s, is a clown in the great European tradition of baggy dress, false nose, and outsized, flapping shoes. She's a grimacer who takes the audience into her confidence with a raised eyebrow, a knowing smile, or a shrug of the shoulders. Two of her solos that were danced in New York are now classics: *Life of a Flower* (do you know what a downpour will do to your petals?) and *Grandma Always Danced* (from mewling baby to wide-eyed adolescent, through marriage and motherhood to toothless old age and angel's halo). Her company is also personable in extracts from her expandable and contractable *Clowns and Other Fools*, including a brand new bit, "Circus Scene," written especially for her by Bertolt Brecht. Not all of the numbers tell their mimetic jokes successfully, and the whole olio of danced gags is much too long; but, when Lotte hits, it's a bull's-eye!

Limón's dancers concentrated mainly on new, or recent, creations. These included *The Unsung*, a paean to those great American Indian chieftains (Limón himself is of Mexican-Indian descent) who fought the white invader-destroyer. This is a superb dance in which the only accompaniments are the sounds of feet, breath, and the rhythm of heartbeat. The brand new *Orfeo*, to music of Beethoven, is a pretty but bland retelling of the ancient myth.

Bill Evans, Joan Moore in Piano Rags.

Limón, a product of Charles Weidman and the late Doris Humphrey, told me how his dance career began: "I read Isadora's *My Life*, and I became incandescent with the desire to dance. She was my dance mother, the Dionysian, the drunken spirit of the soul." Limón has attempted to honor her in his new suite, *Dances for Isadora* (Chopin). The girls who dance his evocations of Isadora—young, maturing, motherly, rebellious, old, and ravaged—portray key movements recorded from life by the superb drawings of Walkowitz, Clara, Craig, and Bourdelle, among others. But her "drunken spirit of the soul" is absent from the Limón work. Nobody has ever captured that, except possibly Angna Enters, our greatest mime, in her *Homage to Isadora*.

Meanwhile the Joffrey Ballet, with its own six-week season at the City Center on 55th Street, started out with new productions of two longtime ballet favorites, Leonide Massine's *Le Beau Danube* (Johann Strauss) and Jerome Robbins's *Interplay* (Morton Gould). The youthful Joffreyites dance *Interplay* with *brio* but without the impact that the American Ballet Theatre brings to it. Gary Chryst is a fine technician, but he completely misses the humor of the solo variation.

The Joffrey dancers also lack the Massine style in *Danube*, although the great man himself restaged it and Alexandra Danilova, who was incomparable as the Street Dancer from 1933 until her retirement, coached the newcomers. Although the Joffrey dancers are apt to stress technical perfection, the choreographic concept of *Danube* is rooted not in a perfect arabesque or a correct fifth position but in body exuberance and kinetic dreams. Here, it is not *what* you do but *how* you do it.

From Salt Lake City to the Hunter College Playhouse came the Utah Repertory Dance Theater with a series of performances that contributed richly to the New York marathon. The company, brought into being by a Rockefeller Foundation grant in 1966, dances proven works by senior modern choreographers and new creations by its own membership. It has always been a troupe of handsome dancers and, since its last visit, it has taken on a splendid professional sheen. Bill Evans remains the best of its resident choreographers and a fine dancer. Tim Wingerd is absolutely brilliant, and the other men and women of this major American dance group are very good indeed.

In Limón's old *Concerto Grosso in D Minor* (Vivaldi) Winge rd captured the breath-taking suspensions of the Doris Humphrey gravity principle of fall-and-recovery. In Ruth Jean Post's joyous *Tricycle* he carried these body suspensions into acrobatics that were simply dazzling. But Evans's *The Legacy*, a new work based on the several wives of an old Mormon family, did not have a dramatic focus, and his *Tin-Tal*, with its vague Orientalisms, seemed withdrawn rather than contemplative. The older *Interim* and *For Betty*, striking abstract dances, and the new, hoofing *Piano Rags*, which perfectly captures the steps and the style of bygone vaudeville and music hall performers, are Evans's masterpieces.

Audiences were also impressed with Linda C. Smith's *Diamond*, a dance of marvelous lighting effects reminiscent of Alwin Nikolais's creations and of Loie Fuller's dances, which Isadora Duncan once described as "the sorcery of light, color, flowing form."

The total marathon includes major ethnic dance attractions from Bali to Mali, on Broadway or in Brooklyn, and, of course, the New York City Ballet, which, following sold-out houses in the Soviet Union, has returned to the New York State Theater to see us through Thanksgiving, Christmas, and well into 1973. □

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

ON SEPT. 14, 1973

Esquire

WILL HOST THE PARTY OF THE CENTURY. YOU ARE CORDIALLY INVITED TO ATTEND.

In September 1973, Esquire will publish what it is confident will be the most important and biggest single issue in the history of consumer magazines.

Numerous Pulitzer Prize winners, Nobel Prize winners, heads of state and many other truly great contributors to the literary scene will assemble between the covers of this one *500-page* issue.

We refer to the 40th Anniversary issue of Esquire, and you can *reserve* your copy *only* as a part of your regular subscription—12 big issues encompassing the full year of Esquire's 40th Anniversary celebration.

The potential is limitless.

Ernest Hemingway, F. Scott Fitzgerald, William Faulkner, Thomas Wolfe (as well as Tom Wolfe, the younger), Ring Lardner, H. L. Mencken, Sinclair Lewis, John Steinbeck, John O'Hara, Dorothy Parker, Irwin Shaw, Philip Roth, James Jones, Truman Capote, Arthur Miller, Tennessee Williams, James Baldwin, William Styron, Gay Talese...

John Dos Passos, Saul Bellow, Leon Trotsky, Damon Runyon, Aldous Huxley, Evelyn Waugh, Vladimir Nabokov, Dashiell Hammett, William Saroyan, John Kenneth Galbraith, Maurice Maeterlinck, Albert Camus, Andre Maurois, Barbara Tuchman...

And we've just begun. All—or as many as we can squeeze in—will have their say in this *brilliant treasury* of the great events of twentieth-century publishing.

Yours as a part of your regular subscription at the low introductory rate of

12 ISSUES FOR ONLY $6.00.

That's a savings of $6.50 off the regular newsstand price and includes the 40th Anniversary Issue at *no extra cost*. (You can buy this special issue at the newsstands for $2.00 if you can find a copy.) A $2.50 saving off the regular subscription rate of $8.50.

We urge you to act quickly. Only a limited number of the Anniversary Issue will be available, and we must accept all orders on a first-come, first-served basis.

Mail the attached postpaid order form, today. We'll be happy to bill you later.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Films

Two Assassinations

BY ARTHUR KNIGHT

The fallout of films from New York's recent Lincoln Center festival continues to rain upon local screens, generally to their mutual advantage. The launching of a picture—especially an American picture—via the festival route involves considerable soul searching among top-level executives. It could transform a potentially popular film into a bit of purely snobbish cinema. At the very least, because festival films are generally chosen by panels of critics, it makes them particularly vulnerable to the attacks of those critics not included on the panels. For critics are not famous for their friendliness to other critics.

Even so, I can't imagine any critic being blind to the multiple virtues of an English film titled *Wednesday's Child*. (Its original and neatly ironic title was *Family Life*, but that probably sounded too austere to its American distributors.) Directed by Kenneth Loach, who last year provided *Kes*, that raspingly unsentimental study of a boy and his pet falcon, *Wednesday's Child* is not merely dispassionate but unremitting as it details the psychiatric pitfalls that can plunge a mentally disturbed girl into the abyss. As the film opens, Janice (Sandy Ratcliff) is an attractive girl in her late teens, no more careless about her dress and appearance than are most of her contemporaries. But she is given to fits of depression, wild outbursts of fury when crossed, and an inability to hold a job. She is the despair of her lower middle-class family.

Like middle-class families everywhere, her parents are shocked and distressed by the suggestion that their daughter be placed in a mental institution. Part of the reason, of course, is financial; but, since England has socialized medicine, their real anguish lies in their own failure as parents and their fear for what the neighbors will think (not to mention their deep-seated suspicion that Janice could pull herself together if she simply put her mind to it). Nevertheless, the girl is institutionalized. Happily for her, she is sent to a home that follows the enlightened procedures advocated by Dr. R. D. Laing—communal living, with emphasis on group therapy. But this method, which involves round-the-clock, sleep-in therapists, is considered both too radical and too costly by the board administering the home. Besides, it takes too long. They prefer something more drastic and immediate, like shock treatments. Thanks to their therapy, Janice is turned into a vegetable, a mute and unthinking lump of flesh that doctors can wheel in and point to as a "classic" case history.

Wednesday's Child is a bit like *Black Beauty*, with Janice subjected to a variety of situations before reaching her final, pitiable destination. But there the similarity ends. Whereas Anna Sewell's novel told us merely that there were goodhearted people and mean ones, Loach's film (and David Mercer's screenplay) places the blame on a dehumanized, dehumanizing society that is more concerned with costs than with consequences.

By coincidence, shortly before seeing *Wednesday's Child*, I had looked at a British documentary, *Asylum*, which not only presented Dr. Laing's treatment but even included some of the same people glimpsed as patients in the Loach film. The difference was extraordinary. Obviously, Loach was not making a documentary; he was merely using real people and places to authenticate his story. Through his skilled use of the camera and sensitive handling of his cast, he has created a film that is more eloquent and far more moving than the real thing.

Unfortunately, Loach's sense of authenticity is sadly, devastatingly lacking from Joseph Losey's production *The Assassination of Trotsky*, another New York Film Festival entry. Although the company traveled to Mexico to film the exteriors at Trotsky's villa and accurately reproduced the known details of Trotsky's final months, more than mere reproduction is needed to bring this sort of material to life. One must be given insight into Trotsky himself, a man who was both hated and passionately adored by millions. In Nicholas Mosley's screenplay he seems little more than a pedant, endlessly dictating his memoirs to his secretaries or offering tiresome little homilies to his retinue of guards and his small circle of friends. To reduce the chill, Mosley allots him a few endearing moments with his wife and suggests a genuine concern in him when a young guard (possibly a traitor) disappears with a raiding party that has attacked the villa. But Richard Burton plays Trotsky with a glacial loftiness (not to mention a variety of accents) that makes the sequences themselves seem contrived.

Alfred Hitchcock once observed that a villain should always be charming, else how would he get close enough to his victims to do them in? This is another problem with *The Assassination of Trotsky*. The mysterious Jacson (Alain Delon), a man of many aliases and clouded antecedents, is so obviously unbalanced that it strains our credulity that anyone as cautious as Trotsky would ever admit him within his gates—particularly since those same gates had been stormed by would-be assassins only a short time before. Even more incredible is the notion that as handsome and intelligent a girl as Romy Schneider, playing one of Trotsky's many secretaries, would put up with Delon's churlish actions for half-an-hour, much less introduce him into the household of her employer. History records that Sylvia Agelof, on whom Miss Schneider's character is based, was a lonely and unattractive spinster—which would explain her relationship with Jacson but might just possibly reduce the appeal of their bedroom scenes together.

If it has become fashionable these days to assign the major credit for a picture to its director, then it is equally just to fix the major blame upon him. In this instance Joseph Losey—who has provided us with such stylish and provocative films as *Accident* and *The Go-Between*—seems totally incapable of drawing out Richard Burton, toning down Delon, or finding any dimension whatsoever for Romy Schneider. He has permitted awkward expository scenes to fill in the historical background of the enmity between Trotsky and Stalin and has given us long, declamatory speeches in which Trotsky outlines his views on communism, the Soviet Union, and the world. Losey has underdramatized and obscured a Mexican-led attempt on Trotsky's life and has included what must be the ugliest and most superfluous bullfight sequence ever presented on the American screen. Worst of all, he has managed to make Leon Trotsky an unmitigated bore, in a film that only sporadically flickers to any semblance of life. □

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Music

New Organ, Capital Music in D.C.

BY IRVING KOLODIN

What is a major concert hall without a proper organ? Incomplete, to say the least. But with one, it can also be a variety of things—blighted, marred, or disfigured. Fortunately, the concert hall of the John F. Kennedy Center for the Performing Arts in Washington, D.C., is none of these. Its long promised organ, underwritten by the Lincoln and Therese Filene Foundation (at the instigation of Catherine Filene Shouse), has been installed, dedicated, and demonstrated—with nothing but advantage to the much-admired concert hall.

A singularly good-looking creation of the Aeolian-Skinner Organ Company, the instrument sits proudly in a niche high above the stage—and its performers. Its visible structure is a study in copper and silver, handsomely framed in the auditorium's prevailing white. Suggestive in its conformations of oversized Panpipes, it confers a touch of welcome contrast to the area around it and to the hall as a whole.

Not everything about a concert organ can be told in a single hearing, even in a work commissioned for its dedication (also by Mrs. Shouse). In its first usage in consort with the National Symphony Orchestra in its season-opening program under the direction of Antal Dorati, it was wholly responsive to the uses John La Montaine made of it in his new symphony entitled *Wilderness Journal*. The extended passages at the beginning of the work stressed such qualities as brilliance, variety, and clear-spoken resonance through the instrument's extensive range. Doubtless it has more richness and warmth than struck my ear this time. But the season is studded with works famous for combining organ and orchestra (by St. Saëns, Strauss, Vaughan Williams, *et al.*), and there is little to be known about it that won't be known about it six months hence.

One gratifying fact was immediately apparent. The planning of that master acoustician Cyril Harris (a participant in the design of the highly successful auditorium of the new Met) has been so skillfully plotted that neither the visual elements of the organ nor its invisible apparatus intrudes on the previously known characteristics of the hall. These, of course, were devised with the plan for the organ as now installed. But much can affect the delicate balance of values in so large a structure. That nothing did is a triumphant affirmation of the contention that acoustic design is both a science and an art, assuming that modern materials are utilized in conformity with enduring principles.

La Montaine's ambitious addition to his literature (which has included several notable successes, including a piano concerto) is a work both highly motivated and unevenly realized. It is a symphony to the extent that it is woven, at some forty minutes length, from a single musical idea of no little melodic appeal. But it is also a song cycle in the sense that its fifteen sections (save for prologue and epilogue) utilize texts from the writings of Henry Thoreau, set for bass-baritone voice. In the aggregate, then, it is a symphony in the Mahler mode, often in a Mahleresque mood. By no coincidence at all it projects the ideals of one Viennese through the technics of another. The theme has twelve notes, all of them different, which fact defines it as an extension of Mahler's extension, Arnold Schoenberg.

With or without this particular stylistic trait, the *Wilderness Journal* jarred me with too many esthetic contradictions for a consistent, unified experience. Bird sounds are utilized throughout, either paraphrased by instruments of the orchestra or, in the epilogue, by reproduction from tape. The organ comes and goes, sometimes in admirable partnership with the orchestra, sometimes less considerately.

That excellent artist Donald Gramm did his high-level best to make himself an eloquent embodiment of Thoreau (as he is billed in the program). However, so long a stretch of singing by any single human voice runs a real risk of monotony (in the true sense a monotone). And the wide range of orchestral effects utilized by La Montaine is sometimes at variance with the celebration of solitude and reflectiveness in the quoted passages. I would describe it, in aggregate, as a work of considerable craftsmanship that faces an uphill struggle for a place in the symphonic repertory.

The program was all-American, beginning with an orchestral *Dithyramb* by Stephen Burton (which generously granted emigrant rights to Bartók and Shostakovich). It is a rousing exercise in orchestral excitement, suitable for opening any concert program, and particularly the first program of a first concert. Everybody plays, and, if in the end it is the conductor who wins, it cannot be said to be an unfair contest.

After La Montaine the audience was offered what is now being called a "Holidays Symphony" by Charles Ives. It is, in effect, the four sections titled "Washington's Birthday," "Decoration Day," "Fourth of July," and "Thanksgiving Day," which have been brought together to comprise a "symphony." For the conclusion Dorati turned hallwards to direct the choral singing by the Oratorio Society of Washington, D.C. of the hymn with which "Thanksgiving Day" ends. This churchly touch may not have been just what Ives had in mind. It is certainly not in the score.

In all circumstances, the orchestra showed the beneficial results of hard work under demanding leadership, and the response by the Washington audience indicated a welcome awareness of what it was hearing. With a new hall and a regenerated orchestra, Washington has a combination of which many American cities could be proud, and more than a few envious. □

SOLUTION TO THIS WEEK'S KINGSLEY DOUBLE-CROSTIC (No. 2012)

P(AULINE) KAEL:
THE CURRENT CINEMA

Television has become the principal advertising medium for movies. Even the few talk shows that held out against the show-biz personalities for awhile are now loaded with movie people plugging away and often inflicting pain and embarrassment by trying to sing.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

SEND YOUR MONEY TO COLLEGE.

Your money won't get any smarter. But some young people will.

Every dollar makes a difference because tuition pays only about a third of the cost of a college education.

For the rest, colleges must count on gifts from individuals like you. From businesses. From everyone who realizes how much colleges benefit us all.

You know the value of college. And now you know its real cost.

Give to the college of your choice. Now.

Advertising contributed for the public good. Council for Financial Aid to Education, Inc. 6 East 45th St., New York, N.Y. 10017

SR CLASSIFIED

CLASSIFIED ADVERTISEMENTS are accepted for things wanted or unwanted, personal services, literary or publishing offers, unclassified elsewhere, miscellaneous items appealing to a special intelligent clientele; jobs wanted; houses or camps for rent; tutoring; ideas for sale. All advertisements must be consonant with the character of Saturday Review. Rates for a single insertion, $1.70 per word, 10-word minimum. Count 2 extra words for Box and Numbers; Phone Numbers count as two words. Rates for multiple insertions:—52 times $1.30 per word each insertion; 26 times $1.40 per word each insertion; 13 times $1.50 per word each insertion; 6 times $1.60 per word each insertion. Full payment must be received eighteen days before publication. We forward all mail received in answer to box numbers. Mail to be called for at this office will be held 30 days only. Address Classified Department, Saturday Review, 380 Madison Avenue, New York, New York 10017.

LITERARY SERVICES

MANUSCRIPT TYPING. Cassettes, tapes. Ambassador Office Service, 10 East 49th Street, NYC, 10017. PLaza 5-1127.

REPORTS, MANUSCRIPTS, writing, editing, typing. All subjects. Reasonable. Personalized. Confidential. Professional team! RC Research, Box 138, Dayton, Washington 99328.

LIBRARY INFORMATION. Research by professional librarians. All fields. Photocopies. Box D-918.

WORDS! WORDS! WORDS! Speeches, articles, novels. Robert Hogrogian, 201-489-0637.

TRANSLATOR, GERMAN—Books, manuscripts, research, any type matter. Box I-782.

CREATIVE WRITING, research, collaboration and editing. Experienced and published staff members. Ellis Research Associates, P.O. Box 2321, Santa Fe, New Mexico 87501.

BOOKS

GOOD USED BOOKS—Wide variety, intelligent selection. Libraries buy regularly; you can too! History, fiction, social activities, literature, miscellaneous subjects. Write for lists. Editions, Desk SR, Boiceville, N.Y. 12412.

SAVE TO 84% on publishers' overstocks. Free catalogue. Readers' Service, 1060 Twin Silo Lane, Huntingdon Valley, Pennsylvania 19006.

OUT-OF-PRINT BOOKS SUPPLIED. Kendall Gaisser, Booksellers, 1242 Broadway, Toledo, Ohio 43609.

PUBLISHERS' OVERSTOCKS catalogue, free. Write Bookseller, Box 54R, Sherman, Connecticut 06784.

FIRST EDITIONS, rare books: Catalogues for year $1.00 (refundable). Libraries purchased. Minkoff, Rowe Road, RFD 3, Great Barrington, Massachusetts 01230.

AMERICANA—Fascinating history of an early Minnesota river town. $2.25. Carver Books, P.O. Box 98, Carver, Minnesota 55315.

SCIENTIFIC PAPERBACKS. 96 p. free catalogue. Box 83-K, Irvington, N.Y. 10533.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

FOREIGN BOOKS

THE FRENCH BOOKSHOP, 700 Madison Avenue (62nd Street), NYC, 10021, where French books are sold exclusively. List sent on request.

BOOKPLATES

FREE CATALOGUE. Scores of beautiful designs. Personalizing and Special designing. ANTIOCH BOOKPLATE, Box 28A, Yellow Springs, Ohio 45387.

BOOKBINDING

COMPLETE PROFESSIONAL BINDING service. Brochure 25¢. Classic Bindery, P.O. Box 572s, Mendham, N.J. 07945.

OUT-OF-PRINT

BOOKS LOCATED without obligation. Coleman Book Locators, 257 East Market Street, Long Beach, California 90805.

NAME THE BOOK. We'll get it! Free search service. CHICAGO BOOK MART, P.O. Box 613-B, Chicago Heights, Illinois 60411.

FREE SEARCH SERVICE. We will find that book you want. James Leishman, Bookseller, Box 1135, Menlo Park, California 94025.

LOOKING FOR A BOOK? Large stock, free search. Dabney Co., Box 31061-R, Washington, D.C. 20031.

YOU NAME IT—WE FIND IT. Satisfaction guaranteed. INTERNATIONAL BOOKFINDERS, Box 1-S, Pacific Palisades, California 90272.

SEARCH WITHOUT OBLIGATION. Curiosa Catalogue, #3, $1.00, refundable. A-to-Z Book Service, P.O. Box 813-s, North Miami, Florida 33161.

ART

BEFORE YOU SELL—check with us. We may do better for you. We specialize in Fine Prints. By appointment: 212-593-3560. Aldis Browne Fine Arts Ltd., Consultants to Collectors, Trusts, Estates. 20 East 53rd Street, NYC, 10022.

"GETTING STARTED IN STAINED GLASS." 30¢. Whittemore, Box D2065, Hanover, Massachusetts 02339.

COLLECT FINE ORIGINAL ETCHINGS and lithographs by the world's great artists including Rembrandt, Picasso, Rouault, Soyer, and Will Barnet. Catalogue Raisonne: Will Barnet, 1932-'72. $5.00 plus 50¢ handling. Associated American Artists, Studio 8, 663 Fifth Avenue, NYC, 10022.

TILLANDSIA SCULPTURES—A new concept! Signed originals. Illustrated brochure 25¢. Walther, RD 3, 9-W Highway, Catskill, New York 12414.

OUTSTANDING SIGNED LITHOGRAPHS. Catalogue free. Yankee Publishing, Box 860, Chula Vista, California 92012.

RECORD MART

FREE 162-PAGE CATALOGUE offers over 1,000 fine recordings of Renaissance, Baroque, Classical, Romantic and Modern music. All late stereo recordings. Highest quality at budget label price. Available only by mail from MUSICAL HERITAGE SOCIETY, Box 932-SR, New York, N.Y. 10023.

ANY $5.98 ALBUM $3.10. Catalogue 25¢. Collective Ear, Box 9355, St. Louis, Missouri 63117.

MUSICAL INSTRUMENTS

NEUPERT HARPSICHORDS, CLAVICHORDS. Oldest, finest. Free catalogue. MAGNAMUSIC, Sharon, Connecticut 08069.

EASY TO PLAY AND MAKE. Quality instruments and kits. Dulcimers (kits $20 up). Psalteries, Banjos, Thumb Pianos; books, records. HERE, Inc., #S, 410 Cedar Avenue, Minneapolis, Minnesota 55404.

BECHSTEIN? Have you ever played one? Do—at Piano Imports, John Wanamaker Philadelphia, Pennsylvania 19101.

COLOR SLIDES

35mm COLOR SLIDES, 10,671 individually sold, described encyclopedia-catalogue. 10¢. Wolfe Worldwide, Dept. 7-102, Los Angeles, California 90025.

SPORTS EQUIPMENT

LIGHTWEIGHT BACKPACK and mountaineering equipment. Imported, Domestic Canoes and Kayaks for day trips, Voyageuring or whitewater. Free catalogue. Moor & Mountain, Dept. 42, Main Street, Concord, Massachusetts 01742.

SCHOOLS

DARROW SCHOOL — Coeducational boarding school. Rugged outdoor environment. Interscholastic sports. Emphasizing community involvement, individual talents. Balance of responsibility and freedom. College preparatory. New Lebanon, N.Y. 12125.

ONLY IN BOARDING SCHOOLS—Would your son or daughter gain from having small classes and personal attention—meeting students from many states and countries—participating in many sports and activities—developing strong educational habits and interests to prepare for college? Write for an interesting statement about American residential schools and a listing of schools nationwide. Include your name, address, student's age, sex and grade. Indicate boys', girls' or coed schools and areas of the country preferred. Only In Boarding Schools, Box 2C, 32 South Street, Baltimore, Maryland 21202.

VERSHIRE SCHOOL—Coed secondary school (our 5th year) combining scholarship, adventure, work, creativity. Staff background Foreign Service, business, education, Peace Corps. Blending also Peace Corps approaches (study in Mexico, Europe) and imagination with desirable traditional goals. Near Dartmouth. Magnificent scenery. Fifty horses and indoor riding ring . . . all very secondary to warm, outstanding education. Vershire, Vermont 05079. 802-685-4547.

COLLEGES

ADULT DEGREE PROGRAM for well-informed, highly motivated adults 26 and over wishing to complete liberal arts undergraduate education. Two-week resident periods on Goddard campus alternate with six-month independent study projects carried on at home under faculty supervision. Program leads to Goddard Bachelor of Arts degree. Write Box S, Adult Degree Program, Goddard College, Plainfield, Vermont 05667.

CAMBRIDGE JUNIOR COLLEGE—See ad under Studies Abroad.

FOR THE GOURMET

WINEMAKING KIT—$4.98. Free catalogue and recipes. Jim Dandy Wine Supplies, Box 30230X, Cincinnati, Ohio 45230.

TEA DEVOTEES naturally select Grace Rare Teas. Free brochure. Grace Tea Importer, Dept. 072, 799 Broadway, New York, N.Y. 10003.

PERSONALS

FELTED IRISH TWEED, highly weather resistant . . . double-bed blanket-spreads (fantastically beautiful). COME to Carol Brown's, Putney, Vermont 05346.

DICKENS NOTES. Ten original serial illustrations (1836-'50) as charming notes. 2-box pack, $2.95. Hawthorne House, Madison, Connecticut 06443.

"LOVE IS" bumper stickers. 3/$1.00. P.O. Box 1976, Miami Beach, Florida 33139.

YOUR PERFUME—yours alone. Questionnaire. Helene Christina, Box 48, Ardmore, Pennsylvania 19003.

CITRUS SEASON begins November. Shipping Florida's finest Grapefruit and Oranges to 47 states, Canada and Europe. Free Brochure. Airport Fruit Shipper, Miami International Airport, Miami, Florida 33159.

CIGARS FOR THE CONNOISSEUR! Finest imported La Reina de Manila Philippine cigars including Coronas Largas at $9.50 and Vegueros Especiales at $11 per box of 25 each or the superb Coronas Largas Especiales at $23 per box of 50. Interpacific Trading Company, 681 Market Street, San Francisco, California 94105.

OLD LETTERS WANTED. Authors, scientists, military leaders, musicians, American statesmen, etc. Collections and important single items bought and sold. Especially interested in literary material. Catalogues issued. Walter R. Benjamin Autographs, Inc., 790 Madison Avenue (at 67th), New York, 10021. 212-RE 4-3902. Established 1887.

SHOULDER BAGS! Hand loomed in Thai Villages. Red, blue or black, with multicolor trim. Only $7.00 ppd. Money-back guarantee. Dahr Products, Box 3739, Dept. 28, Beverly Hills, California 90212.

PROFESSIONAL INTERIOR DECORATING for $10 a room. For roommaker kit and details, send $1 to Box 743, Columbus, Indiana 47201.

HANG A POET. I'll handprint and frame your favorite poem. A unique gift. 212-648-6232, Box I-602.

INTELLIGENT PEOPLE don't want to smoke! $1.00 brings you (guaranteed) "How to Stop Smoking." HELENCO, Box 7384, Albuquerque, N.M. 87104.

FREE CATALOGUE: Low direct prices. Diamonds, Sapphires, Silks, Cosmetics, Crystal, Hunting, Fishing, Camping Supplies. Herter's Inc., Dept. CS, Waseca, Minnesota 56093.

ALPHAPHONE™ headset—brain-wave trainer. Free literature. Aquarius Electronics, Box 627-C, Mendocino, California 95460.

RECORDERS—FINEST MAKES. Largest music selections. Free catalogue. RECORDER CENTER, Amenia, N.Y.

JEWISH WALDEN TWO? Write Jubilee-S, Rt 4, Box 128, Temple, Texas 76501.

COME SEE CUSTOM JEWELRY in silver and gold by Jack Elliott. Jewelry tools, supplies, metal by mail. ARE creations, Box 155-S, Plainfield, Vermont 05667. 802-454-8325.

TOP CASH PAID FOR LETTERS and documents of famous people. Immediate decision! Immediate payment. Ask TODAY for free brochure, "How To Sell Your Autographs." Catalogues issued. Charles R. Hamilton, 25 East 77th Street, NYC, 10021. 212-628-1666.

MEDITATION evokes New Age consciousness. First-year bimonthly course free. MEDITATION, P.O. Box 566, Ojai, California 93023.

RECORDERS (FLUTES) KUENG SWISS import $12 up; Purcell from $7. Student Special, Corelli $6.50; Recorder Instruction Kit, Soprano Recorder, Method Book, three 7" LP Instruction Records, boxed, $8.95, add sales tax plus shipping $1.50. Recorder Music Methods. Guitar Music. Free catalogue. 10-2-D, HARGAIL, 28 West 38th Street, NYC, 10018.

(Continued on page 98)

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

(Continued from page 97)

PERSONALS

OPEN TO CONTROVERSY? There are two sides to every question. Send for free booklet, "The Cigarette Controversy," Dept. SR, The Tobacco Institute, 1776 K Street, N.W., Washington, D.C. 20006.

LEARN ALL ABOUT WINES. Impress others with your knowledge. Comprehensive home-study program includes wine labels, maps, pronunciation records, more. Free brochure. Andre Duval Institute, 53 West Jackson Boulevard, Chicago, Illinois 60604.

TRUSTWORTHY FOODS BY MAIL? No chemicals ever? 27th year? Unusual story-list? YES. Write Walnut Acres, Box S, Penns Creek, Pennsylvania 17862.

LIKE TO BE A WRITER? I've helped thousands achieve their goals. Free analysis of your abilities. John Chabot Smith, Castle Meadow Road, Newtown, Connecticut 06470.

LETTERS OF AUTHORS, scientists, statesmen, musicians, military leaders, etc., bought, sold. Collections, single items. Catalogues issued. Kenneth Rendell, 620 Bristol, Sommerville, Massachusetts 02144.

RUBBER GARMENTS in fashion shades of LATEX and STARSHEEN (Continental) rubber. Illustrated catalogue $4.00 airmail from Kastley Limited, P.O. Box 24, Blackburn, Lancs., England.

SLEEP-LEARNING Equipment—Alpha devices. Strange catalogue free. Autosuggestion, Box 24-SR, Olympia, Washington.

FREE BOOK. Prophet Elijah Coming Before Christ. Megiddo Mission, Dept. 14, 481 Thurston Road, Rochester, N.Y. 14619.

RESEARCH, writing, translations, expertly done. All topics. Reasonable. Professional author. Alex White, Allenhurst, N.J. 07711.

SITUATIONS WANTED

RESEARCH LIBRARIAN, formerly with leading national magazine, seeks research, library or indexing position. Expertise in these areas plus knowledge of reference materials and information sources. Training in fields of international affairs/politics. New York-New Jersey, Washington, D.C. areas. Box I-263.

PHYSICIAN SEEKS POSITION where spouse (Ph.D. English) can find another job teaching in college. Box I-786.

LIBRARY ASSISTANT national weekly magazine, and formerly secretary to president of magazine, seeks interesting position book/magazine publishing. Box I-374.

EMPLOYMENT OPPORTUNITIES

"AUSTRALIAN OPPORTUNITIES HANDBOOK"—Latest information about Government Paid Transportation, Employment, Business, Farming, Housing, Education . . . plus "Employers' List" and Forms. Send $1.00. International Services, Box 19107-MT, Washington, D.C. 20036.

OVERSEAS JOBS—Now hiring, 103 countries, all occupations, high pay, free transportation, tax benefits, latest computerized reports. $2.00. TRANSWORLD, International Airport, Box 90802-K, Los Angeles, California 90009.

BRIGHT, SELF-STARTER. Varied office work phonograph export company. Some typing desirable. 212-736-5855.

EXCITING OVERSEAS JOBS. Directory $1.00. Research Associates, Box 889-R, Belmont, California 94002.

TEACHING POSITIONS In Foreign Countries. New 100-page guide contains information about organizations seeking teachers. Includes requirements, geographic areas, addresses for application forms. Guaranteed satisfaction. Special price $2.00. Foreign Countries, Box 514-K28, Ames, Iowa 50010.

EMPLOYMENT OPPORTUNITIES

AUSTRALIAN FACTS, 634 pages, 357 photographs, $2.25. Australasian News, Box 6428, Torrance, California 90504.

OVERSEAS OPPORTUNITIES . . . Higher pay! Free Transportation! Complete information including Directory of 135 companies hiring thousands of Americans overseas . . . all occupations! Send $1.00. International Opportunities, Box 29232-WS, Indianapolis, Indiana 46229.

AUSTRALIA WANTS YOU!—New Zealand, too! 50,000 Jobs! Paid Transportation! 1973 Handbook and Forms, $1.00. Austco, Box 3623-K, Long Beach, California 90803.

HOUSES AVAILABLE

For Sale

BERKSHIRES, NEAR TANGLEWOOD—Large, new, all-electric contemporary home on 2½ wooded acres, 500' frontage on beautiful secluded lake. Excellent winter and summer fishing, boating, swimming; near skiing, tennis, golf. Cathedral living room with fireplace, 4 bedrooms, 3 full baths, 2-car garage, many extras; central vacuum system, etc. $65,000. Owner, RD 1, Box 92A1, Great Barrington, Massachusetts 01230. 413-528-4467.

VERMONT. All-season chalets, village homes. Choice acreage. Free brochure. ROLAND BEERS & ASSOCIATES, Manchester, 05254.

WESTERN MASSACHUSETTS—Charming, restored 8-room home. 4 fireplaces. Modern kitchen with appliances. Wideboard floors. Red barn. 4 acres on river. $40,000. Available immediately. 415-387-4148 or Box I-729.

TRENTON—Salt-water home, view of Mount Desert. 2 bedrooms, guesthouse, fireplace, secluded among lawns and trees. 18 acres, over 600 feet of shore frontage. $135,000. Linnehan Real Estate Associates, 132 High Street, Ellsworth, Maine 04605. 207-667-8456.

For Winter Rental

FLORIDA GULF FRONT—Sanibel Island. 4-bedroom house with pool. Also 3-bedroom condominium. Two week minimum. SR Box I-629.

HOUSES FOR EXCHANGE

RENT-FREE VACATIONS. Write Holiday Home Exchange, Box 555, Grants, N.M. 87020.

MEMBERS EXCHANGE HOMES for rent-free vacations. Write: Vacation Exchange Clubs, 119 Fifth Avenue, New York, 10003.

APARTMENTS AVAILABLE

For Rent

Furnished/Unfurnished

ITHACA, N.Y. Walk to Cornell campus for lectures, concerts. Fairview Heights . . . a new environment for living designed by Marcel Breuer. Write to Fairview Associates, 100 Fairview Square, Ithaca, N.Y., or call Mr. Sullivan, 607-AR 2-3420.

PROPERTY FOR SALE

VERMONT'S NORTHEAST KINGDOM—Homes, land, investment properties near skiing, lakes, mountains. Free Brochure. Peter D. Watson Agency, Greensboro, Vermont 05841. 802-533-2909/2651 until 10 p.m.

SOUTHWICK, MASSACHUSETTS—110 acres including 3-par golf course. Room for motel, nursing home. Entertainment expansion. May divide. Attractive terms. James A. Mutter, Realtor, Northampton, Massachusetts 01060. Call 1-413-584-3382, 413-527-4493.

PROPERTY FOR SALE

ONE OF THE MOST UNUSUAL AND SPECTACULAR homes in San Diego County, located approximately 4 miles southwest of Rancho Santa Fe, is now available because the owner has moved to the East. This new contemporary designed residence contains approximately 3,900 square feet on 4 different levels, consisting of a recreation room which is located on the lower level along with a full bath, a fireplace and a kitchenette, a main floor consisting of a living room with 22 foot ceilings, a dining room with stained glass windows and an adjoining patio and kitchen with every modern convenience, a master bedroom on its own private floor with a spacious bath, dressing room, fireplace, and two balconies from which one can see the ocean to the west and the mountains to the south and east. Finally, on the top floor there are 2 bedrooms and a bath along with 2 studies which could be converted into 2 bedrooms.

THE POOL is surrounded by real and imitation boulders and has every imaginable facility including high and low diving boards, waterfalls, slides, outdoor barbecue, wet bar, and snack bar as well as two unusual cavern-like dressing rooms (the owner has invested over $100,000 in this area alone).

A RECESSED LIGHTED TENNIS COURT with dressing rooms is located a short distance from the house and to the south are stables large enough for boarding three horses but which are readily expandable.

THERE IS ALSO A SMALL HOUSE consisting of 2 bedrooms and a bath, which could be either servants' quarters or a guest house with certain renovations.

THERE ARE 17 ACRES which would be difficult to surpass in beauty and strategic location because of the magnificent view of the ocean and the mountains, along with a rolling green lawn and beautiful gardens with towering eucalyptus trees. This is a truly unforgettable estate in which the owner's investment is $585,000. The asking price is $495,000. Liberal financing is available.

ROBERT K. SMITH, Realtor, 7911 Herschel Avenue, La Jolla, California 92037. 714-459-4471.

MAINE—Wooded acreage, starting at $90 per acre—also all forms of real estate. FRANKLIN REALTY CO., 44 Main Street, Farmington, Maine 04938. Tel. Office 207-778-2852 (Mr. Barrows).

NORTHERN VERMONT REAL ESTATE. Brooks H. Barron, Kent Mitchell, Realtors, Hyde Park, Vermont 05655. 802-888-4287/2433.

FLORIDA'S EXCITING new Bayfront residential resort. Waterfront, golf course lots. Condominiums, Yacht and Country Club. BAY POINT, Box 9137, SR, Panama City Beach, Florida 32401. 904-234-3308. AD4762.

CALIFORNIA'S GOLD COAST—Del Mar—surf view acreage. 15 acres, zoned multiresidential and commercial. 15 minutes to beautiful San Diego Bay, Beaches, Boating. Horsemen's Paradise. Best climate in United States. Property is 5 minutes to UCSD campus, Gulf General Atomic, new VA Hospital and many new industries, and beautiful La Jolla. Surf, Ocean and Torrey Pines State Park Views—UNIQUE. These parcels are available separately or together. Write or call for information and brochure. McKellar & Wyer, Inc., Realtors, 1202 Camino Del Mar, Del Mar, California 92014, Phone Area 714-755-9318, Mr. Robinson.

BUSINESS OPPORTUNITIES

MEN—WOMEN! Fill out income tax forms at home in own business. We show you how. Simple, easy to learn. $700 per month earnings possible. Details mailed free. No salesmen. Hurry. Federated Tax Home Study Training School, 2086 Montrose, Chicago, 60618.

FOR SALE: Established growing N.Y. publisher of respected and expensive newsletters and high-priced annuals. Repeat mail-order business from University, Government and Corporate Libraries. Presently showing small loss. Excellent profit potential. $40,000 cash needed for outright purchase. Box I-781.

HOW TO MAKE MONEY writing short paragraphs. Information free. Barrett, Dept. C-310-O, 6216 North Clark, Chicago, 60660.

INTERESTED IN OWNING A FRANCHISE?—Business of your own, or full- or part-time money-making opportunities? Find out what's available. Send name for FREE 5-month subscription to Salesman's Opportunity Magazine, Dept. 1053, 1460 Hancock Center, Chicago, 62611.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

CAMPS

IDEAL FOR FIRST TIME CAMPERS: Appel Farm Arts & Music Center for Children, Elmer 24, New Jersey 08318.

RETIREMENT LIVING

RETIREMENT LIVING AT ITS FINEST at Crestview Center in the heart of the residential metropolitan Toledo (Ohio) area. A specially-developed community where retired people share the security of health services, the comfort of never being alone, the assurance of protection against inflation, the independence of coming and going as they please. Life lease or a new monthly fee plan available. For complete information, write Mr. Maurice Seiple, Director of Development, Crestview Center, Harroun Road, Sylvania, Ohio 43560.

RETIRING? Seek a better climate? Let us recommend impartially 14 or more places ideal for you, based on your interests, health, income, etc. We have personally investigated 1,500 active retirement facilities. Our 9th year. Send today for free questionnaire. Richard S. Brown, Active Retirement Council, Box 465, Evanston, Illinois 60204.

VACATIONS

THANKSGIVING & CHRISTMAS HOLIDAYS in Arizona are even more joyous when celebrated at The Wigwam, in Litchfield Park, just minutes from Phoenix. There's a round of specially planned Holiday activities designed to keep your family's mood happy and festive, with the emphasis on entertainment; including swimming, tennis, dinner dancing, riding on spectacular desert trails, and for Dad, great golf on two Robert Trent Jones courses. Lovely accommodations brighten the spirit, too, as does the excellent food. Attractive American Plan rates. For spectacular brochures, rates, further information and reservations, contact: Reade Whitwell, Vice President, THE WIGWAM, Litchfield Park, Arizona 85340. Telephone: 602-935-3811.

TOBAGO COTTAGES—All sizes, locations, and rental rates. Cottage Owners Association, Box 194, Tobago, W.I.

HALF MOON HOTEL AND COTTAGE COLONY in Jamaica. Montego Bay's only complete resort. With its own 18-hole Robert Trent Jones golf course. 7 all-weather Laykold tennis courts. Air-conditioned hotel and cottage rooms. 15 cottages with private swimming pools. Montego Bay, Jamaica, W. I. Represented by Hetland & Stevens, Inc. in New York, 212-TN 7-1450; George R. Smith Company in Los Angeles, 213-461-3541; in San Francisco, 415-392-7277.

ON THE BEACH, Siesta Key, Sarasota, Florida. Deluxe apartment, 2 bedrooms, baths, living-dining room, kitchen. All rooms panoramic views. Available January 1st. Kathryn Weare, Ogunquit, Maine. 207-646-5662.

MONTANA MOUNTAIN LODGE—Winter activity: Snowmobiles, cross-country skiing. Heated pool, sauna. Desert Mountain Lodge, West Glacier, Montana 59936.

NOW YOU CAN TELL HIM . . . Your travel agent probably never heard of us . . . or our island either, for that matter. But Corn Island* is as beautiful as the blue Caribbean waters that surround it, and our new hotel offers first-rate comfort and food in an island-style setting you'll never forget. *Rates from $20 a day, American Plan.* Lundy's Island Inn S.A., Great Corn Island, Nicaragua, Central America. *Perhaps the last unspoiled island in the Caribbean.

BUCKS COUNTY — If you can't be a house guest in Bucks County, be ours. The 1740 House is a charming country inn. 24 rooms, each with terrace, overlooking the Delaware River. For a brochure, write: 1740 House, Lumberville, Pennsylvania 18933. Tel. 215-297-5661.

NASSAU—Relax in 1-2-3 room apartments. On excellent beach, pool. Cable Beach Manor, Box 263, Nassau, Bahamas.

JEWEL BOX ELEGANCE, Lighthouse Inn, 52-room mansion showplace of the shore at New London, Connecticut. 2½ hours from Gotham. Superb food. E.P. Doubles $15 up. Brochure S.

SAN FRANCISCO ON A BUDGET? Charming, centrally located. Hotel Beresford, 635 Sutter Street.

VACATIONS

SUN VALLEY, IDAHO—Luxurious, split-level, 3 bedroom, fully-equipped condominium available for seasonal or weekly rental, $75 day. Ideally situated, center of village, shuttle bus to lifts, free use of heated pool. Call Janie Coleman, 208-726-5321.

PATAGONIA RANCH HIDEAWAY. Superb scenery . . . sun . . . air . . . for riding, swimming, tennis, birding. Circle Z Ranch, Patagonia, Arizona 85624. Brochure.

THE SEASIDE, unspoiled Longboat Key, Florida 33577. Year 'round resort on private beach.

WHALER'S INNE, Mystic, Connecticut—Inviting, homey seatown hostelry, walking distance to famed Mystic Seaport marine museum. Doubles $14-$24; 4 persons, $20-$24. Reserve by mail or phone.

A TREASURE by the sea. Unique oceanside resort apartments. Leisure living in tropical tranquillity—or exciting sport fishing and imaginative underwater exploring. Interested? Sunburst South Resort, Box 145, Islamorada, Florida Keys, 33036.

SHENANDOAH VALLEY FARM — Beautiful, secluded, quiet, comfortable. Dixons, McGaheysville, Virginia 22840.

"CARIBE PLAYA"—Patillas, Puerto Rico. Remarkable seaside efficiency resort. Economical.

FLORIDA KEYS—ISLAMORADA, Box 222R, Drop Anchor Resort Motel. AAA. Relaxed oceanfront tropical living. Efficiencies. Pool. Brochure.

TAMARINDE GUESTHOUSE. All comforts, yet reasonable. Reserve now, P.O. Box 247, St. Maarten, Netherlands Antilles.

CRUISE INLAND FLORIDA—Relax, 5 idyllic days on LAZY BONES plus airboat and swamp buggy jaunts in Everglades country. $156 complete—November through April. Featured on Jack Douglas TV series. Brochures, reservations, write Capt. Maurer, Shanty Boat Cruises, Rt 1, Box 366SR, Ft. Myers, Florida 33905.

STUDIES ABROAD

GRADUATE STUDIES IN ENGLAND—Alvescot College now offers tailor-made programs for graduates. Candidates pursue their studies under the guidance of highly qualified advisors especially appointed to assist each graduate. The *Oxford University System for graduate studies is followed.* For more information write to: Alvescot College, Alvescot, Oxfordshire, England.

SPANISH WINTERIM: University credit programs, 3*/4 weeks, (December 28th-January 19th*, 26th). Classes, Tours, Madrid/Seville. Total: $495*/$555. ACADEMIC YEAR IN SPAIN, College Apt. 1084, Seville, Spain.

COLLEGE PLUS TRAVEL—First time ever—Exciting new junior college travel-study program entirely overseas. Full credit. A.A. degree, assured senior college transfer. Semester each London, Amsterdam, Madrid, Paris plus tours to Scotland, Germany, Switzerland, Austria, Africa, Italy. Area studies plus full Freshman-Sophomore curriculum in class. Write CAMBRIDGE JUNIOR COLLEGE, 49 Washington Avenue, Cambridge, Massachusetts 02140.

STUDY IN GUADALAJARA—Spanish language, art, Mexican culture. Study abroad programs organized for U.S. schools and colleges. IMNA, Tolsa 300, Guadalajara, Mexico.

PRAESTEGAARD FILM-VIDEO-PHOTOGRAPHY — A school/workshop/community with complete working and living facilities. Write: David Nelson, Director, PRAESTEGAARD, Kettrup pr., 9690 Fjerritslev, Denmark.

LIMFJORD COLLEGE of the Photographic Arts—A unique setting for study and research in the motifs of cine and still photography. Related studies in Art History, Poetry, Scandinavian History. Write: LIMFJORD COLLEGE, Klim Strand, 9690 Fjerritslev, Denmark.

HACIENDA EL COBANO. The University of Oklahoma's Study Center, Colima, Mexico, offers credit and non-credit programs for 1972-'73.

SPANISH: High school, adult and college level.

WORKSHOPS: Watercolor Painting, Archaeology, Ornithology, Human Relations, Creative Writing, Mexican Investment and other programs as requested. Dr. Richard Hancock, 555 East Constitution Avenue, Norman, Oklahoma 73069.

STUDIES ABROAD

STUDY PROGRAMS IN FRANCE—French and all Fine Arts. Programs include: Academic Year, January Interim, Summer in France, Christmas in Paris and London. PARIS AMERICAN ACADEMY, 9 Rue Des Ursulines, Paris 5.

COLUMBUS INTERNATIONAL COLLEGE of Spain—A 2-year American liberal arts University in Seville. Freshman-sophomore curriculum, American faculty, dormitory boarding, Fall-Spring semesters. Write: Columbus International College, Avda Victoria, 43, Seville, Spain.

SPEND A YEAR OF COLLEGE in Denmark, Israel and the Soviet Union. Write T. Feld, Lea College, Albert Lea, Minnesota 56007.

LEARN SPANISH IN MEXICO. If you really want to learn Spanish intensively and economically, start any Monday at CIDOC. For catalogue on language school and de-schooled academy, write: CIDOC, Apdo. 479, Cuernavaca, Mexico.

TRAVEL

LIVELY FRENCH FAMILY welcomes paying guests. Top hill, 18th century ultramodernized mansion, in the heart of France. Thevenin, Solignac, Haute Vienne, France.

AFRICAN ADVENTURE—New York/Timbuctu, the fabulous Sahara capitol. 17 days all inclusive, $595 land portion. Ouagadougou Express through Africa's most remote lands, 19 days all inclusive, $695 land portion. Write for brochures. African Explorers, Dept. SR, Professional Building, Route 9, Parlin, N.J. 08859.

NEW YORK CITY, HOTEL BEDFORD, 40th Street, Just East of Park Avenue. For the discriminating guest who prefers a quiet and gracious hotel in the midst of New York's most convenient Grand Central area . . . near all shopping and entertainment. Beautifully decorated rooms and suites . . . featuring fully equipped kitchenettes . . . air conditioning and TV . . . ideal for families . . . Continental Restaurant and Cocktail Lounge. Write for brochure, 118 East 40th Street, New York, N.Y. 10016.

WORLDWIDE FREIGHTER GUIDE — $1.75. Rates, schedules. 700 passenger carrying Freighters. TravLtips, 40-21Z Bell, Bayside, N.Y. 11361.

MEXICO LEISURELY RAIL TOUR—February 23rd-March 11th, 1973. Chihuahua, Cuernavaca, Taxco, Oaxaca, Monte Alban, Mitla, Puebla, Cholula, Mexico City, Aquascalientes. Private lounge and diner, American-style menus. Air-conditioned "pullmans." Cost from S.F. $695-El Paso $540. WAMPLER TOURS, Box 45-SR, Berkeley, California 94701.

LYSISTRATA—Cruise the Greek Islands with Professor A. D. Winspear in his private yacht. Swift, clean ship, excellent food, interpretative lectures. Two-week cruises $350 (U.S.) inclusive. Write for 1973 brochure, P.O. Box 3263, Postal Station B, Calgary 3, Alberta T2M 4L8.

BUY OR RENT *a new car for your trip abroad.* Free Catalogue. Europe By Car, Inc., 45 Rockefeller Plaza, New York, N.Y. 10020.

ANTIGUA, WEST INDIES—Modern Falmouth Harbour Beach Studio Apartments. Maid, shopping service. Private white sand beach. Swim, sun-bathe, fish, sail, snorkel. No charge for use of boats. Write for color brochure. Hancarib, 770 Welch Road, Palo Alto, California. 415-325-5627.

AMAZON JUNGLES—"Green Hell Tour" of the Amazon. 18 days, $565 land portion. "Jungle Railroad" an unusual 19-day adventure through the virgin jungles of the Amazon. $695 land portion. Write for brochures. Amazon Explorers, Dept. SR, Professional Building, Route 9, Parlin, N.J. 08859.

FAR OUT. *Wilderness. Mexico. Tarahumara Indians.* Canyons 7,000' deep. Remote villages. 1,000' waterfall. 4 wheel-drive special safari cars. Free brochure. Tag-A-Long Tours, Box 1206H, Moab, Utah 84532.

THIS AD + $7.00 per person, double occupancy entitles you to real value New York. Next time try CENTURY-PARAMOUNT HOTEL, 235 West 46th Street, convenient theatres and everything; 650 rooms, with bath, TV, air conditioning. Single-$10.00. Don't delay, reserve now. This is a "sleeper" in every sense.

ROUND THE WORLD EXPEDITION—180' yacht. Remote places—Galapagos, Easter Island, Tahiti, Fiji, etc. Share expense. Shipmates wanted. Fried, Apt. 1A, 330 East 49th Street, NYC, 10017.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

Kingsley Double-Crostic

Reg. U.S. Patent Office

By Janet Elliott Cameron

No. 2012

WORDS	DEFINITIONS
A. Jack of clubs, especially in a form of loo in which it is the best trump	105 185 200
B. Plump down suddenly	71 149 107 49 177 17 154
C. Out of financial trouble (2 wds.)	69 14 50 34 106 163 135 1 126 207
D. Camera operation that shows the setting for the action or scene that follows (2 wds.)	2 39 77 90 204 70 181 57 11 140 110 211 98 81 134 212
E. Kipling novel about Dick Heldar and his futile love for Maisie: *The*_____ (3 wds.)	83 91 161 73 114 141 78 12 203 176 164 186 3 15 33
F. Protagonist in a tragedy by Shakespeare	94 159 18 119 210
G. Reproduction in which the offspring resemble the parents and undergo the same cycle of development	96 109 52 150 158 4 189 19 13 38 199
H. Ancient Greek musical instrument having many strings	35 184 8 157 53 202 116 46 169 175
I. Remove anything useless and burdensome (3 wds.)	16 47 20 79 139 166 205 84 58 111 190 132 74 213 138
J. City in S.E. Sweden, site of the country's oldest and most important university (var. sp.)	156 23 151 7 188 112 197
K. *Weariness can snore upon the flint when* _____ *finds the down pillow hard* (Shakespeare; 2 wds.)	24 172 72 37 165 108 133 9 95 21

WORDS	DEFINITIONS
L. Granting pardon	128 22 48 25 76 93 113 5 191
M. English poet, known for his translation of Omár Khayyám (2 wds.)	97 45 75 194 36 168 170 6 80 104 183 82 51 162 152 136
N. Jewish fast day in memory of the destruction in Jerusalem of the First and Second temples (3 wds.)	130 28 173 206 63 144 65 32 102
O. Tree yielding turpentine	87 66 120 147 193 40 182 62 99
P. Panegyric	27 100 143 148 125 115 192 137 41 180
Q. Type of television entertainment (2 wds.)	146 216 171 44 196 54 174 60 67 117 123 131 101
R. Lake in S.E. Canada, in Ontario	61 55 29 103 198 214 124 160 89
S. English satirical novelist: *The Loved One* (2 wds.)	56 145 129 155 208 187 122 30 86 217 142
T. Device for moving miners from one level to another (2 wds.)	43 127 92 153 10 42 178 26 201
U. Most common house plant (2 wds.)	88 118 195 209 179 121 167 59 215 85 31 64 68

DIRECTIONS

Don't let the definitions scare you. If you can guess five or six of these WORDS correctly, you should be able to solve the Double-Crostic . . . . When you've guessed a WORD, fill in the dashes, and also write each letter in its correspondingly numbered square in the diagram. When all the squares are filled in, you will have a quotation from a published work. Dark squares indicate the ends of words. If there is no dark square at the right side of the diagram, the word carries over to the next line . . . . You should be able to see words and phrases begin to form in the diagram on the basis of having just a few letters. Enter the letters you can guess into the diagram and the blanks in the defined WORDS, and you'll find yourself working from WORDS to diagram and back, solving the puzzle . . . . The initial letters of the defined WORDS spell the name of the author and the title of the work from which the quotation was taken. This acrostic feature can be very helpful to the solver.

						1 C	2 D	3 E	4 G	5 L	6 M	7 J	8 H	9 K	10 T		11 D							
12 E	13 G		14 C	15 E	16 I	17 B	18 F	19 G		20 I	21 K	22 L		23 J	24 K	25 L	26 T							
27 P	28 N	29 R	30 S	31 U		32 N	33 E	34 C	35 H	36 M	37 K	38 G	39 D	40 O	41 P	42 T								
43 T	44 Q	45 M	46 H	47 I	48 L		49 B	50 C	51 M		52 G	53 H	54 Q	55 R	56 S	57 D								
58 I	59 U	60 Q	61 R		62 O	63 N	64 U		65 N	66 O	67 Q		68 U	69 C	70 D	71 B								
72 K	73 E	74 I	75 M	76 L		77 D	78 E	79 I	80 M		81 D	82 M	83 E	84 I		85 U	86 S							
87 O		88 U	89 R	90 D	91 E	92 T	93 L	94 F		95 K	96 G	97 M		98 D	99 O	100 P	101 Q							
–	102 N	103 R	104 M		105 A	106 C	107 B	108 K	109 G	110 D	111 I	112 J	113 L	114 E	115 P	116 H	117 Q							
	118 U	119 F	120 O		121 U	122 S	123 Q	124 R	125 P	126 C		127 T	128 L	129 S		130 N	131 Q							
132 I		133 K	134 D	135 C	136 M	137 P	138 I		139 I	140 D	141 E	142 S		143 P	144 N	145 S	146 Q							
147 O		148 P	149 B	150 G	151 J	152 M	153 T		154 B	155 S	156 J	157 H	158 G	159 F	160 R	161 E								
162 M	163 C	164 E	165 K		166 I	167 U	168 M		169 H	170 M	171 Q	172 K	173 N		174 Q	175 H	176 E							
177 B	178 T	179 U	180 P	181 D	182 O	183 M		184 H	185 A	186 E	187 S		188 J	189 G	190 I		191 L							
192 P	193 O	194 M	195 U	196 Q	197 J	198 R	199 G	200 A	201 T	202 H	203 E		204 D	205 I		206 N	207 C							
208 S	209 U	210 F	211 D		212 D	213 I		214 R	215 U	216 Q	217 S													

Solution of this week's Double-Crostic will be found on page 95 of this issue.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED

8 great cars in one: The 1973 Audi.

Presenting the 1973 Audi.

1. It has the same type of steering system as the racing Ferrari.

2. It has the same trunk space as the Lincoln Continental Mark IV.

3. It has the same type of ignition system as the Porsche 911.

4. It has about the same headroom and legroom as the Rolls-Royce Silver Shadow.

5. It has independent front suspension like the Aston Martin.

6. It has front-wheel drive like the Cadillac Eldorado.

7. It has a luxurious interior like the Mercedes-Benz 280SE.

8. It gets the same expert service as the Volkswagen.

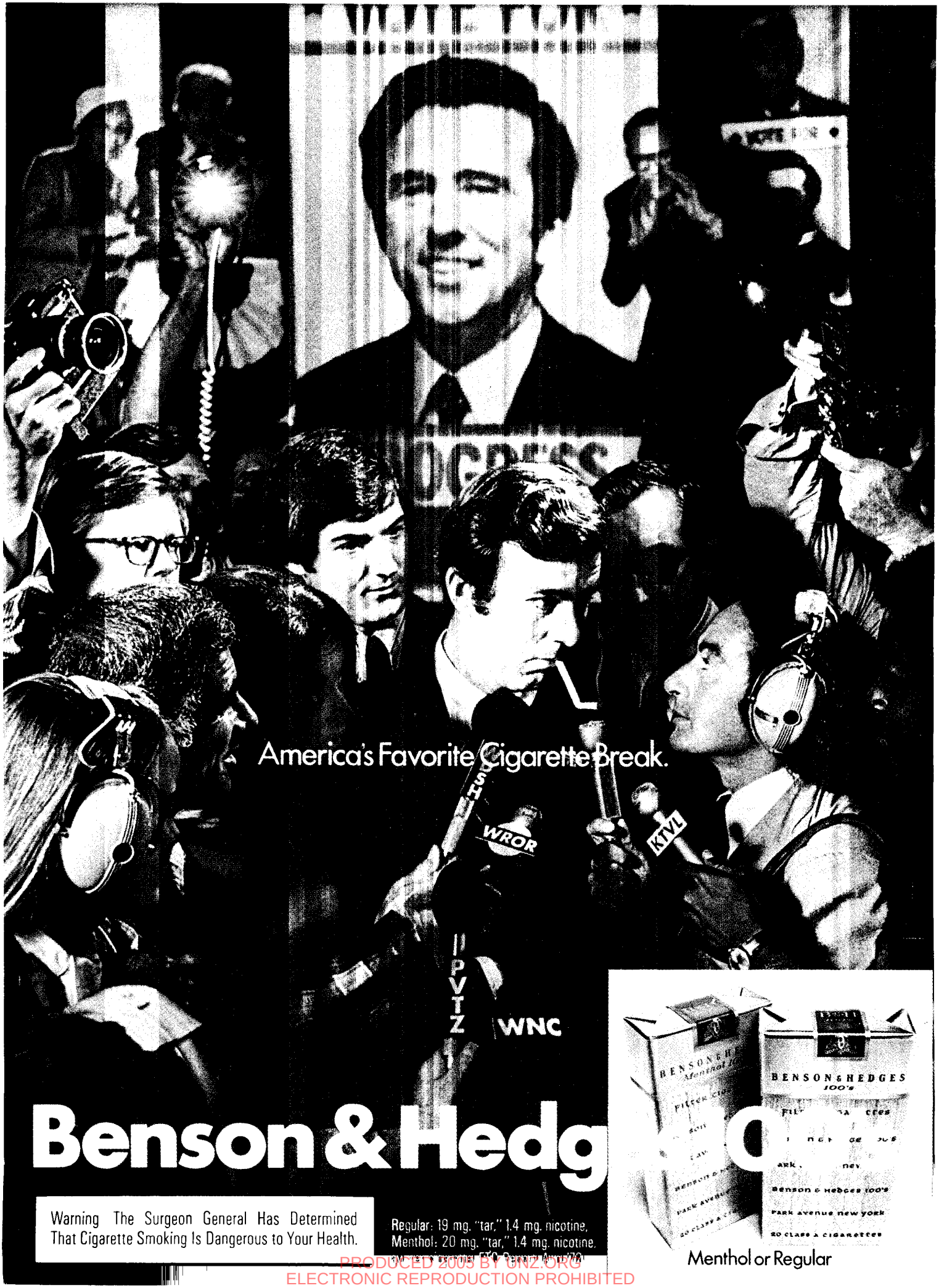
The price of the 1973 Audi is $3,960.*

Not very much money considering the cars you're getting.

The $3,960 Audi®
It's a lot of cars for the money.

*Suggested retail price East Coast P.O.E. $3,955 (West Coast P.O.E. slightly higher.)
Local taxes and other dealer delivery charges, if any, additional. Whitewall tires optional at extra cost.

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED


America's Favorite Cigarette Break.
WROR
KIVI
WNC
Benson & Hedg
Warning The Surgeon General Has Determined That Cigarette Smoking Is Dangerous to Your Health.
Regular: 19 mg. "tar," 1.4 mg. nicotine,
Menthol: 20 mg. "tar," 1.4 mg. nicotine.
BENSON & HEDGES
100's
Benson & Hedges 100's
Park Avenue New York
Menthol or Regular

PRODUCED 2005 BY UNZ.ORG
ELECTRONIC REPRODUCTION PROHIBITED